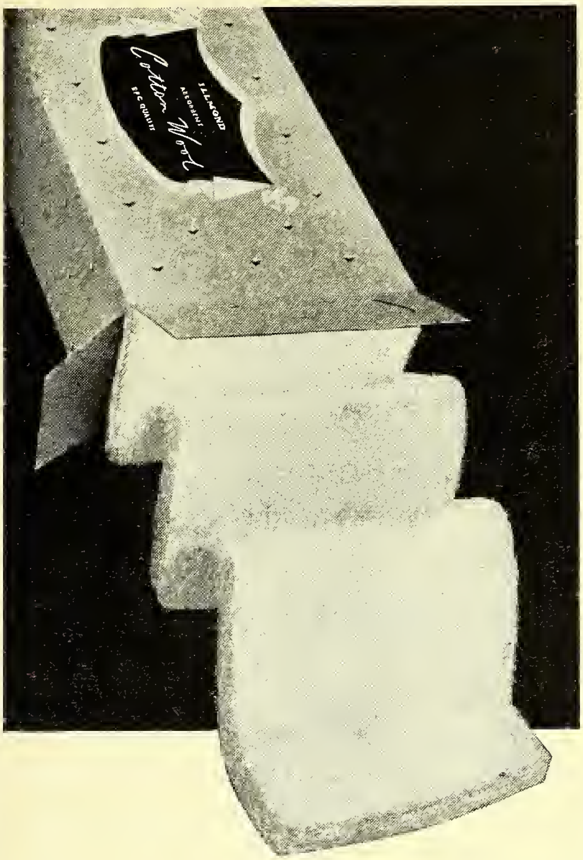

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THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 173 May 7, 1960 No. 4186

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PUBLISHED BY
MORGAN BROTHERS (PUBLISHERS), LTD.,
at 28 Essex Street, Strand, London, W.C.2
Telephone : Central 6565
Telegrams : Chemicus, Estrand, London
WOLVERHAMPTON: 89 Woodland Avenue, Tettenhall Wood.
GLASGOW: 160 Nether Auldhouse Road, S.3. *Phone: Langside* 2679.
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The
CHEMIST AND DRUGGIST

Volume 173 MAY 7, 1960 No. 4186

Royal Opening for Department

PRINCESS AT NORTH MIDDLESEX HOSPITAL

IN her last public engagement before her wedding Princess Margaret declared open on April 26 a new out-patient department—of which the pharmacy department forms practically the whole of the second floor—at the North Middlesex Hospital, London, N.18.

A pharmacist, too, delivered the address of welcome to the Princess, for the chairman of the hospital management committee is Mr. J. Anderson Stewart, B.Sc., B.L., F.P.S. (secretary of the Middlesex Pharmaceutical Committee). In her reply Princess Margaret said that the building had been designed for "space, elegance and colour" and she hoped that one effect would be to attract new entrants to the hospital service. The pharmacy department—spacious, airy and well equipped—is in sharp contrast to the one it replaces, though it suffers from too slavish adherence to plans drawn up twenty years ago. The department, which is under Group Pharmacist Mr. Stanley Shaw, F.P.S., serves all the hospitals in the group, the supplies for other hospitals being sent out in fibreboard lidded boxes that may be padlocked for security. Chief departure from the original plans has been the inclusion of an aseptic department admirably adapted to its purpose. For the service of the out-patients to whom the remainder of the building is devoted there is on the ground floor a separate out-patient dispensary with hatch into a waiting lobby.

A Contractor Resigns

N.H.S. DISPENSING "UNECONOMIC"

BECAUSE he finds the dispensing of prescriptions under the National Health Service to be uneconomic, Mr. Wilfred George, The Market Place, Halesworth, Suffolk, a market town with a population of 2,350, has given notice that he intends to discontinue as contractor. Only dispensing chemist in the town, he contends that the area he is allowed to supply—a mile radius from his shop—is not an economic unit. Mr. George stated that the number of prescriptions he handled was well below the national average. A check during January revealed that the total number of prescriptions brought in between 5.30 and 6.30 p.m. was thirty-five. Mr. George intends to close his shop at 5.30 p.m. after May 7. The nearest chemist undertaking National Health Service dispensing will then be nine miles away. Mr. W. C. Reade (chairman of the Suffolk Executive Council) announced Mr. George's retiring from the Service at a meeting of the Council at Ipswich, recently. The three doctors at Halesworth had been asked to carry out the dispensing until June 30. After that date further arrangements would be made.

Purchase Tax

SALE-OR-RETURN ARRANGEMENTS

THE Commissioners of Customs and Excise have recently been reviewing the results of investigations into transactions at or about the time of the 1959 Budget, in taxable goods which had been supplied to retailers by registered manufacturers and wholesalers on sale-or-return or similar terms. They state that considerable inaccuracies were found in the notifications of dates of sale or appropriation in the periodical returns submitted by dealers to their suppliers which resulted in the goods being improperly returned as liable to the post-Budget rates of tax instead of at the higher pre-Budget rates. Consequently the registered suppliers are being required to make good this tax loss. The Commissioners add that they are "greatly disturbed by the extent of these irregularities and feel bound to draw attention to the fact that returns required under sale-or-return or similar arrangements should be furnished to the registered suppliers promptly and accurately, and that continued laxity in this matter might cause fresh consideration to be given to the reactions of this system of trading on the purchase tax."

Examination Results

INTERMEDIATE PASSES

THE following candidates satisfied the examiners in the Intermediate examination held by the Pharmaceutical Society in England and Wales in March:—

Adegunle, S. M., Cricklewood; Baker, V. W., Wednesbury; Barker, J. E., Harrogate; Biles, P. E., Cirencester; Carter, R. J., Hythe; Davies, D. B., Llandyssul; Davies, T. J., Rhyl; Day, M. J., Norwich; Draper, Cicely, Sandown; Hale, Leslie, Southampton; Hamilton-Smith, J. C., Addington; Harding, K., Ringwood; Hollis, D. A., Horsham; Hoyle, D. W., Stockport; Jones, Pamela, Hoylake; Lancaster, D. J., Luton; Lewis, B. R., Petts Wood; McLeod, Francis A. F., Wigan; Marshall, D. V., Nottingham; Molson, G. R., Spalding; O'Malley, Beatrice M., Market Drayton; Peddie, Jean L., Stourbridge; Porteous, Janice A., Stourbridge; Robinson, Jean A., Manchester; Smith, N. E., Salford; Turner, G. P., Crowborough; Wiley, R. J., Wolverhampton; Wilkins, D. V., Brighton; Williams, R. G., Caernarvon; Wilson, Lynda, Liverpool.

The following candidates satisfied the examiners in the Intermediate examination held in Scotland:—

Gardner, Helen, Chester; Hughes, I., Abergele; Layfield, G. A., Houghton-le-Spring; Meanwell, D., Lincoln; Millar, P. H., Wigan; Moore, Margaret, Coxhoe; Riley, R. J. A., Colchester; Scuffham, D. A., Grimsby.

MATRON, PRINCESS AND CHAIRMAN (A PHARMACIST): H.R.H. Princess Margaret, after officially opening a new out-patient department of the North Middlesex Hospital (see above), makes her departure accompanied by the matron of the hospital and the chairman of the hospital management committee (Mr. J. Anderson Stewart, B.Sc., B.L., F.P.S.).

European Free Trade

OUTER SEVEN REGULATIONS ISSUED

THE European Free Trade Association (Origin of Goods) Regulations, 1960, were published on April 4. They give effect to the provisions of the Stockholm Convention for determining eligibility for Area tariff treatment. A Treasury Order providing for Convention rates of duty for goods imported into the United Kingdom is to be published shortly, to become operative from July 1. The introduction of Convention rates of duty will necessitate certain adjustments in the drawback arrangements, which will also be published shortly, to become operative from the same date. Information on how to claim the benefit of the Convention rates of duty on goods imported into the United Kingdom is published in Customs Notice to Importers No. 73, obtainable from the Secretary, Customs and Excise, King's Beam House, Mark Lane, London, E.C.3. The seven-nation Association came officially into force on May 3 when the instruments of ratification were deposited at the Swedish Foreign Office.

Problems of Distillation

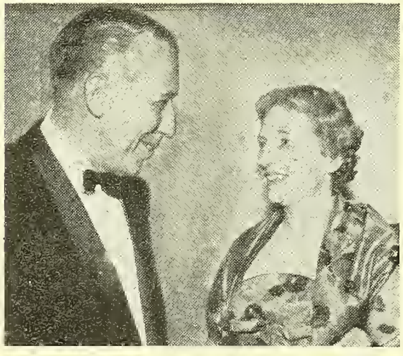
SYMPOSIUM AT BRIGHTON

SIX hundred leading chemical engineers from fourteen countries including Russia and America heard Sir Alexander Fleck deliver the opening address at an international symposium on distillation held at Brighton, May 4-6. Sir Alexander gave a brief historical review of distillation from the early days, thus leading up to the subject matter of the symposium dealing with the present trends and techniques. The delegates then turned to discussing twenty-eight papers from authors in ten countries, encompassing a wide variety of aspects of distillation. The meeting was arranged as the twenty-fourth meeting of the European Federation of Chemical Engineering.

Curbing Hire-purchase

PHOTOGRAPHIC EQUIPMENT AFFECTED

CAMERAS, enlargers, projectors and other photographic equipment not designed specifically for commercial use are among a list of goods now subject to hire purchase restrictions. The necessary Orders (published as S.I., 1960, Nos. 762, 763 and 764), impose restrictions on the initial deposit and the repayment period in certain hire-purchase and credit sale agreements and affect the initial payment on certain hiring agreements entered into after April 28. In the case of the photographic goods mentioned the minimum deposit is 20 per cent. of the cash price and the maximum period in which the balance must be paid is two years. Electric blankets and dry-shavers are similarly affected. The regulations do not apply to medical, surgical, dental and veterinary appliances, equipment and apparatus.



The president of the Association of British Pharmaceutical Industry (Mr. E. D. Carey) with the Parliamentary Secretary to the Ministry of Health (Miss Edith Pitt) at the Association's annual dinner on April 30 (see p. 538).

Sulphate of Ammonia

SOME IMPORTS TO COST MORE

THE Board of Trade, which has been investigating an application for the imposition of anti-dumping duties on ammonium sulphate (other than analytical reagent quality) imported from Western Germany and Belgium, states that it is satisfied that dumping has been taking place and that "this threatens material injury to the United Kingdom industry." The German and Belgian manufacturers concerned, however, have agreed to raise their export prices immediately and the Board is therefore taking no further action. No decision has yet been reached on the application for the removal of the protective duty which the Board has under consideration.

Royal Society

FOREIGN MEMBERS' ELECTION

AT a meeting of the Royal Society recently the following were elected foreign members: Professor G. W. Beadle, California, U.S.A.; Professor R. A. Granit, Sweden; Professor G. B. Kistiakowsky, Massachusetts, U.S.A.; and Academician L. D. Landau, Moscow, U.S.S.R.

IRISH NEWS

Summer Examinations

CLOSING DATE FOR ENTERING

THE Pharmaceutical Society of Northern Ireland points out that the closing date for entering the Society's summer examinations is May 10. All entries must be lodged with the Society at 73 University Street, Belfast, by that date. The examinations are being held on June 10 and 11.

STATUTORY COMMITTEE

Cases considered during 1959

THE Statutory Committee of the Pharmaceutical Society met on six occasions during 1959 and considered forty-six new cases. That number was two less than in 1958 and included twenty-seven cases referred to the Committee by the Council of the Society concerning the advertising of dispensing services. Apart from those, all the cases were based on convictions.

The advertising cases showed an increase of eleven over the previous year whilst the convictions fell by thirteen.

Three inquiries directed in 1958 were taken during the year and two cases where inquiries had been held and adjourned in earlier years came before the Committee for decision. In addition there were two cases from 1958 where the decision whether an inquiry should be directed had been held over.

Of the nineteen reports considered six arose from prosecutions undertaken by the Society for offences under the Pharmacy Acts and four were the result of police prosecutions for offences connected with the Dangerous Drugs Act.

The report states it was again necessary to draw attention to the question of qualified supervision and in one case the committee observed that:—

> "Any pharmaceutical business may be in difficulties for a period over not being able to get a qualified manager, but the Committee must make it plain once again that it is the duty of the company in those circumstances to stop selling poisons until a properly qualified manager is available. If a company deliberately goes on selling poisons when there is no qualified manager in control of the business of the retail sale of drugs, then the company runs the risk that a direction may be made by this specified Committee to the effect that for such a period as may be specified either the company ceases to be an authorised seller of poisons, or the premises where the company carries on business be removed from the Register and disqualified for being registered for some named period."

A tabular summary of the cases considered is appended.

	1959	1958
Complaints or information received	46	48
Chairman's direction:		
No action	30	15
Warnings	11	15
Inquiries	4	12
Under consideration ..	1	

Classification of Cases

No action		Warnings issued		Inquiries	
Convictions		*Convictions*		*Convictions*	
Road Traffic Act	3	Pharmacy Acts	4	Pharmacy Acts	1
Dangerous Drugs Act	1	Pharmacy Acts & Therapeutic Substances Act	1	Road Traffic Act	1
Complaints					
Advertising of dispensing services	26	Dangerous Drugs Act	3	Offence Against the Person Act	1
		Receiving stolen goods	2		
Under consideration	1	Bankruptcy Act	1	*Pending*	
				Assault	1

Decisions in Inquiries

Inquiries directed and held in 1959

No direction	1
Adjourned for one year ..	1
Name to be erased	1

Inquiries directed in 1958 *and held in* 1959

No direction	2
Adjourned for one year ..	1

Inquiries adjourned from earlier years

No direction	1
Adjourned for a further year	1

One application for restoration to the register was considered and granted.

NEWS IN BRIEF

THE Parliamentary Secretary to the Ministry of Health (Miss Edith Pitt) has appointed Mr. J. G. Hall to be her private secretary.

MR. A. E. Hancock of J. G. Ingram & Son, Ltd., has been elected chairman of the British Rubber Hot Water Bottle Manufacturers' Association for 1960–61.

PARCELS weighing up to 22 lb. may now be posted by both air and surface transmission to Japan and the Republic of Korea. The previous weight limit was 11 lb.

OVER 50,000 copies of the Handbook on Prescribing are now being destributed in England and Wales to all doctors in the National Health Service (*C. & D.*, April 2, p. 359).

THE CIBA Fellowship Trust, founded for the purpose of furthering the exchange of ideas between scientists in the United Kingdom and on the Continent, has awarded eight fellowships for the coming academic year.

NOTES on the Tariff provisions of the Convention establishing the European Free Trade Association (EFTA) which begin to take practical effect on July 1 are given in the *Board of Trade Journal of* April 29.

THE result of a study of the trade in pharmaceutical preparations for medical use, and the existing legislation in more than a dozen countries, is reported in the *International Digest of Health Legislation,* **II,** No. 1 (H.M. Stationery Office, price 12s.).

SPORT

Golf. — LONDON CHEMISTS' GOLFING SOCIETY, first meeting of the season, held at South Herts golf club, on April 20. *Captain's Prize,* J. S. Bremner (13), 72; *Thomson Cup,* R. H. Davies (captain) (10), 3 up; *Hepburn Shield,* Dr. H. Davis (12), 73; other leading scorer, W. N. Cockburn (11), 73.

LIVERPOOL CHEMISTS' GOLFING SOCIETY, at Huyton and Prescot golf club, recently. *Ucal cup,* 1, N. Callaghan (11), 70; 2, G. W. Clinton (scratch), 75; 3, D. Hindle (15), 76.

MANCHESTER PHARMACEUTICAL GOLFING SOCIETY, first meeting of the season, at Worsley golf club, thirty-five members played a 4-ball Stableford. Messrs. T. P. Gregson and S. G. Webb won with 45.

LOCAL OFFICERS

GUILD OF PUBLIC PHARMACISTS

Manchester.—*Chairman,* Miss I. F. A. Lewis; *Vice-chairman,* B. H. Smith; *Treasurer,* S. Hanmer; *Secretary,* A. C. Cross; *Social Secretary,* A. J. Ross.

PHARMACEUTICAL SOCIETY

Hull. — *Chairman,* F. S. Howe; *Senior vice-chairman,* G. A. Merkin; *Junior vice-chairman,* D. Livesey; *Treasurer,* C. A. Hewitt; *Minute Secretary,* M. E. M. Wright, *Secretary,* A. McDonald, 67 Porter Street, Hull (telephone: 20374).

Leicester. — *Chairman,* J. Lauder; *Vice-president,* E. Hugh Butler; *Assistant secretary,* A. W. Dyer; *Social secretary,* C. Fairborough; *Secretary,* Miss M. H. Perkins.

Newcastle.—*Chairman,* G. H. M. Graham; *Vice-chairman,* T. D. Clarke; *Treasurer,* L. R. Renwick; *Secretary,* A. McGuckin, c/o Mawson & Proctor Pharmaceuticals, Ltd., Low Friar Lane, Newcastle-upon-Tyne.

Plymouth. — *Chairman,* F. J. Packer; *Vice-chairman,* H. G. Reynolds; *Treasurer,* J. P. Fox; *Secretary,* Mervyn Madge.

Sheffield. — *Chairman,* W. V. Burton; *Vice-chairman,* D. W. Slinn; *Treasurer,* C. A. Fox; *Secretary,* W. F. Patterson.

TOPICAL REFLECTIONS

By Xrayser

Protecting the potential consumer

Pharmaceutically, the interim report of the Committee on Consumer Protection (p. 494) is not without interest, particularly in regard to the use of soft-drink bottles as containers for substances not generally regarded as coming into the category of beverages. The Committee did not consider the problem to be a serious one, we read, and " it would still be impossible to prevent the individual from keeping left-over fluids in such bottles." Apart from the possible legal complications involved in using a bottle which, I have always understood, was regarded by the manufacturers of the soft-drink as being only on hire for the payment of a deposit, the attitude of the Committee surprises me. It seems to me that it is unsound to argue that it is impossible to prevent the individual from keeping left-over fluids in such bottles, and to advance that as a reason for permitting the retailing of other substances in the bottles. We know that strange things can be done by the individual in the home, and that the bottle labelled " American cream soda " may contain a liquid that enhances the whiteness of the weekly wash, while another proclaiming itself to be vinegar may occasion more than a little surprise to the person who removes the cork in the presence of a naked flame. But to put that forward as a reason for condoning the retailing of fluids other than soft drinks in soft drink bottles, and to make the statement that members of the Committee do not consider the problem to be a serious one, will strike the average pharmacist as poor and unacceptable. I feel that no pharmacist with a regard for his professional reputation would side with the Committee, and that consumer protection is better taken care of by the pharmacist.

Revolutionary changes

I am grateful to your correspondent, Mr. L. J. Jordan—to whom, by the way, I owe an apology for having, in a moment of mental aberration, referred to him as Mr. Davis in one sentence of my previous comment—for his future letter expanding the views he had expressed. I am as anxious as any one to see pharmacy take on a more professional character. Nothing would give me greater pleasure or satisfaction than to see a proper recognition of the pharmacist's services, to the extent that he could jettison the sidelines which, at present, are essential to his economic survival. To live by practising exclusively the work for which we have been trained is a most worthy ambition, but Mr. Jordan's salaried service is one that requires considerable thought. I take it that he visualises pharmacy on the lines of the present medical service, in that the individual patient will opt to go on the list of a pharmacist contractor, presumably being granted the right to change to another such list if he so desires. Would the pharmacist, then, be paid a *per capita* grant according to the size of his list ? Or a straight salary, regardless of the amount of work he does ? The suggestion that such a service should be given from private premises, because the alternative of health centres would be an enormous expense for the State to provide, conveys the hint that pharmacy and altruism are closely related —not an unknown feeling. But Mr. Jordan may be right in feeling that a united professional voice might emerge from such a set-up, more closely in line with that of the doctor and the dentist. I hope he will write again.

Election addresses

There can be few tasks in the literary field presenting more difficulty to the author than the composition of an election address, and a larger number than usual have addressed themselves to the task this year. Regular attenders at branch meetings, and those who read the pharmaceutical Press carefully throughout the year, are less in need of relying on the candidates' personal statements, for their worth is to some extent known. I note that this year considerable stress is laid on publicity and public relations—a theme that proved popular at last year's meeting of Branch Representatives. Such unanimity of support, both from past and prospective members of the Council, should ensure some action in that direction.

TRADE NOTES

Now Tax-free.—B. M. Laboratories, Ltd., Suffolk House, Copse Hill, Sutton, Surrey, announce that the 25-tablet pack of Bemaco has been pronounced exempt from purchase tax.

A Size Discontinued. — The British Drug Houses, Ltd., Graham Street, London, N.1, announce that the ten-tablet pack of Ancolan is deleted from the list. The packings of twenty-five and 250 tablets remain.

Increased Discounts.—W. Woodward, Ltd., 51 Clapham Road, London, S.W.9, announce a new and improved price structure for Woodwards gripe water coinciding with Press advertising. The discounts range from $22\frac{1}{2}$ per cent. for split packs to $25 + 12\frac{1}{2} + 7\frac{1}{2}$ per cent. for twenty-five gross.

Change of Name and Price.—FBA Pharmaceuticals, Ltd., 37 Bedford Row, London, W.C.1, have changed to Fabahistin the name of their antihistamine preparation Incidal (mebhydrolin) and have reduced the prices. There has been no change in formula.

Change of Poisons Classification.—Roche Products, Ltd., 15 Manchester Square, London, W.1, point out that their specialities Marplan, Gantrisin and Madribon are now included in Schedule IVB of the Poisons Rules, and that Thephorin tablets, transferred to Schedule VII, no longer require a prescription.

An Additional Strength.—Burroughs Wellcome & Co., 183 Euston Road, London, N.W.1, are now issuing an additional 50-mgm. tablet of Darenthin brand bretylium tosylate, the hypotensive compound that acts by selective sympathetic blockade. The initial dose of Darenthin is recommended to be small, since some patients may be maintained on a low daily dosage, and the new tablet facilitates that procedure.

Cautionary Labels Available. — Sandoz Products, Ltd., point out that, since thenalidine is listed under Schedule 7 of the Poisons Rules, 1960, all Sandosten preparations, other than Sandosten ointment and Sandosten nasal spray, are subject to special labelling regulations if sold by retail otherwise than on prescription. Labels with the cautionary warning are available from the company on request.

Reformulated.—Allied Laboratories, Ltd., 140 Park Lane, London, W.1, announce that, from May 9, the formula of their hæmatinic and reconstructive tonic, Melosan tablets, is changed. As previously the tablets are silver-coated and contain ferrous sulphate, aneurine hydrochloride, riboflavine, nicotinamide and ascorbic acid, but they now incorporate, in addition, nux vomica and kola to provide "a true tonic and stimulating action." The tablets are being actively promoted as a general tonic. Packings and prices are unchanged. The new Melosan tablets are not included in any of the Schedules to the Poisons Rules.

Two Kinds of Worm Powder. — Hitherto Radiol Chemicals, Ltd., 78 Upper Richmond Road, London, S.W.15, have been marketing a product known only as Radiol worm powder. That product is now called Radiol worm powder-S (strongyles) and is for the treatment of small round worms in horses, though it may also be used effectively for cattle, sheep, goats and poultry. A second product Radiol worm powder-A (ascarids) now covers an entirely different range of worms—the large round worms—and the product may be used effectively for horses, cattle, pigs, dogs, cats and poultry. One product is made up in an 8-oz. pack because the dose is approximately half that of the other.

Bonus Offers

Pharmethicals (London), Ltd., 20 Gerrard Street, London, W.1. Allercur antihistamine ointment. Fourteen tubes invoiced as twelve.

NEW PRODUCTS

Twelve-hour Effect.—Duncan, Flockhart & Co., Ltd., Wheatfield Road, Edinburgh, 11, claim that their newly introduced Falapen brand tablets of benzylpenicillin are so constructed that they provide an immediate and a gradual dose, thus providing adequate cover for twelve hours after a dose of one tablet. The packs are containers of 100 (10 x 5 x 2) foil-packed tablets of 500,000 international units.

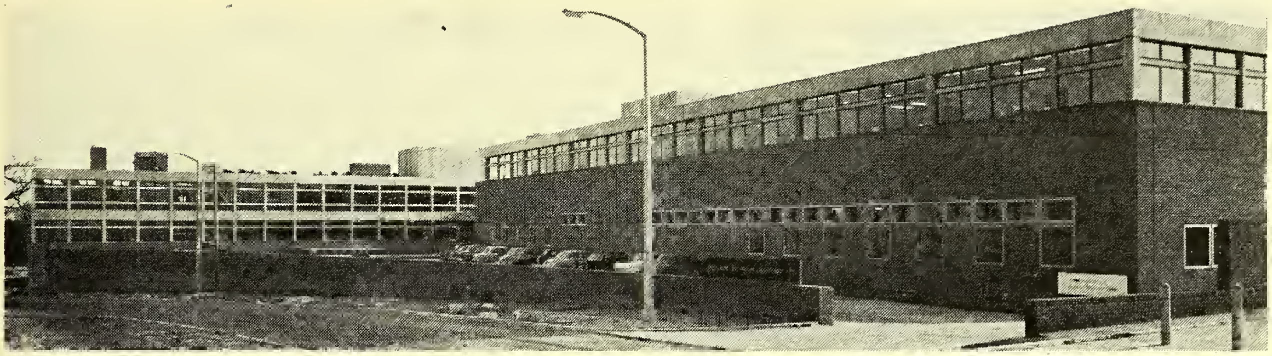
Corticosteroid in Skin Lotion. — Merck Sharp & Dohme, Ltd., Hoddesdon, Herts, announce the availability of Decadron (dexamethasone 21-phosphate) skin lotion. The lotion allows that potent corticosteroid to be used in a variety of allergic and inflammatory skin conditions. The makers claim that it is often effective where other skin preparations have failed. Decadron skin lotion is supplied in 15-mil plastic squeeze bottle. Each mil contains 1·0 mgm. of dexamethasone 21-phosphate (as di-sodium salt).

An Antibiotic Against Amœbiasis.—Parke, Davis & Co., Ltd., Staines Road, Hounslow, Middlesex, announce the introduction of the Humatin capsules, 250 mgm. (paromomycin, P.D. & Co.), a white, amorphous, stable, water-soluble antibiotic obtained from culture filtrates of a streptomyces. Humatin is indicated in the treatment of intestinal amœbiasis and other intestinal infections including those due to unidentified pathogens. It has also proved of value in the suppression of nitrogen-forming bacteria in the gastro-intestinal tract of patients suffering from hepatic coma, and is suggested for the suppression of intestinal flora preceding bowel surgery. Humatin is not appreciably absorbed, and is therefore ineffective against systemic infections. The presentation is a bottle of sixteen capsules each containing Humatin sulphate equivalent to 250 mgm. of Humatin base.

A Diuretic from Denmark. — Leo Pharmaceutical Products, Copenhagen, Denmark, announce the introduction of a new and improved diuretic, Centyl (bendrofluazide) discovered and developed in the company's laboratories. Given orally, Centyl is understood to be 100 times more effective, weight for weight, than chlorothiazide, and almost twice as potent as the parenteral mercurials. Although it increases the sodium excretion rate potassium excretion normally remains within physiological limits. Centyl is indicated whenever diuresis is required in the treatment of œdema, hypertension, various syndromes associated with sodium retention and premenstrual tension. Centyl is available as 2·5-mgm. and 5-mgm. tablets in bottles of twenty-five, 100 and 500. It is not a scheduled poison. Inquiries should be sent to Leo Laboratories, 223 Kensington High Street, London, W.8.

Now Generally Available. — Boots Pure Drug Co., Ltd., Station Street, Nottingham, announce that Aprinox (the 3-benzyl derivative of bendrofluazide) oral diuretic is now freely available for general use. Clinical trials are understood to have shown that the drug has no significant effect on the serum electrolyte pattern, and that potassium supplementation is seldom necessary. Aprinox is claimed 100 to 200 times as potent as chlorothiazide and to have a longer duration of action, a single daily dose of 5 to 10 mgm. being normally adequate. Doses of 5-10 mgm. once or twice weekly are often sufficient for maintenance. Aprinox is indicated in œdema and fluid retention and, like other chlorothiazide derivatives, is useful in the treatment of hypertension (either alone or with a ganglion-blocking agent). The packs are bottles of 100 and 500 2·5-mgm. plain, or 5-mgm. scored tablets.

A Golden Tan in Six Hours. — Associated Products, Ltd. (distributors: Fassett & Johnson, Ltd., 86 Clerkenwell Road, London, E.C.1), are marketing, under the name He-tan, a clear, colourless lotion which, applied to the skin, produces a "vital, golden tan." He-tan lotion contains a percentage of vitamin D, and in use is simply smoothed gently on to the body (the hands must be washed immediately after use but the "tanned surface" must be kept dry for at least half an hour). A really deep tan is acquired by applying He-tan in the evening three or four times at hourly intervals and renewing every morning. He-tan does not prevent sunburn. Although made for men, He-tan also provides the answer to the feminine problem of pale, insipid skins in summer surroundings. The pack is a window-cartoned square bottle that enables the clear lotion to be seen without opening the carton.



MINISTERIAL OPENING FOR NEW LABORATORIES

Research, production and administration in a £1 million establishment

AN American manufacturer to whom the Minister of Health has twice lent his name—once in laying the foundation stone of new British premises, and the second time in officially declaring them open—is obviously destined for an important future in the pharmaceutical industry of the United Kingdom.

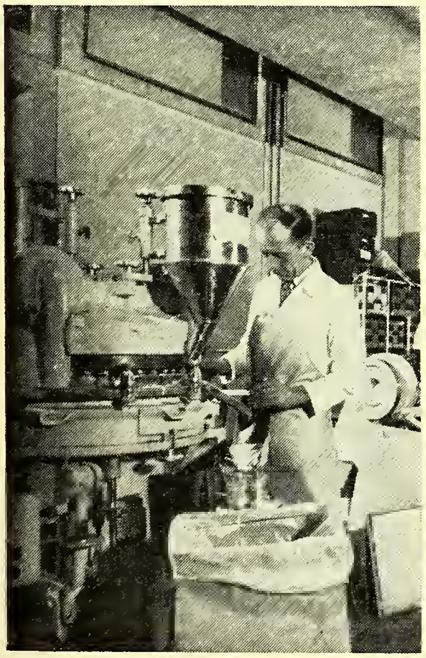
The new buildings at Welwyn Garden City of Smith, Kline & French Laboratories, Ltd., convey strongly the impression that the company is taking the right steps in the right order to gain permanent pre-eminence in the industry. It is obviously going to forge a long way ahead from its present home-market turnover of more than £2 millions a year.

It is noteworthy that the company has provided quarters for an institute devoted to research much nearer the kind normally carried out by universities than is done by most other manufacturing chemists in this country at present. It is true that the institute is independent of the British company, and that its links are with the twenty-times larger research organisation of the parent company in Philadelphia, U.S.A. Nevertheless the Institute is being staffed by British scientists under a British director (Dr. W. A. Bain, formerly professor of pharmacology, Leeds University), and is working on lines which he, under the most general guidance from America, will prescribe.

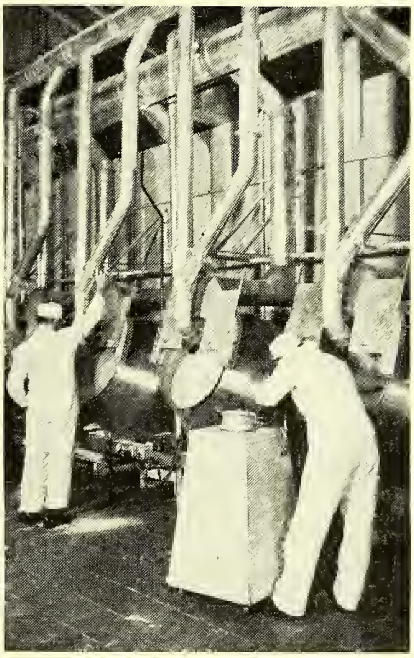
The British company has, however, its own research departments. One of them, significantly, is given over to work on correlating chemical structure with biological activity. The work involves preparing novel chemical structures for pharmacological testing, and introducing modifications into existing drugs to improve their biological activity. As would be expected, in view of the importance in the company's range of specialities of the distinctive Spansule presentations, a section of the laboratory is devoted to routine examination of "sustained-release" formulations. The products are submitted in the laboratory to conditions simulating those they would encounter within the body of the patient, and the batches are released for sale only after they have been shown both to undergo ingestion at the required slow rate and to be uniform in "fill" and composition. Research is also being continuously done into devising improved methods of analysis and assay, especially by means of instruments.

Apart from research there are the laboratories for control and development commonly and necessarily to be found in any pharmaceutical manufacturing establishment—their function to examine all raw materials (80 per cent. of which come from the company's own chemical works at Tonbridge, Kent) and containers; to test and approve the products of manufacture; and to regulate, improve or devise new processes of producing or handling the medicinal and veterinary specialities produced. A laboratory solely for work on plain and coated tablets applies and enforces on the manufacturing departments exceptionally precise tablet dimensions and/or coating, as well as the required tests for uniform weight of active ingredient set by official standards.

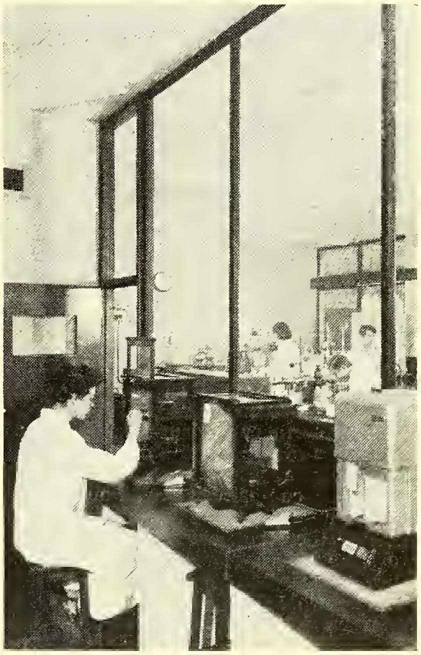
In the production sections of the new buildings an operation that is also a spectacle is the preparation of "seeds"



Tablet punching.



Tablet coating.



Pharmaceutical laboratory.

with which medicaments are incorporated to form the Spansule specialities. The operation is one of slowly building up a pellet from a much smaller nucleus until it has simultaneously reached the desired size and the required rate of release of medicament. It is understood that as much as three months from commencement may elapse before the final O.K. is received from the sustained-release laboratory. In separate departments are prepared (a) creams, ointments and liquids (equipment includes, among other things, four 2,250-litre stainless-steel tanks); (b) tablets, both coated and uncoated; and (c) capsules. The machines needed to fill the Spansule pellets uniformly into their hard-gelatin cases at speed, and in "mass" quantities, are ingenious, intricate and precise. So close to perfection is their output that, at the detailed inspection to which the capsules are subjected before being "fixed" with a light gumming, the proportion of rejects is minutely small. For some export destinations the capsules are overprinted with an identifying mark in an edible white ink formulated in the company's laboratories.

Medical Promotion

A characteristic feature of the Smith, Kline & French organisation is that its largest administrative department is the "medical promotion group." Like most of the other "office" functions the group is accommodated, with generous space and maximum daylight, at first-floor level. The group incorporates medical writing and print-production sections and it supervises the company's medical representatives. Ancillary departments are a training school for the representatives and certain administrative personnel; a printing department in which many of the pieces designed by the department are produced, together with most of the company's labels and company stationery; and an addressing and list-maintenance unit.

The SKF mobile colour television unit is a service available to, and greatly appreciated by, the medical profession, and has its permanent quarters at the works. The unit has obvious, and already well demonstrated, value in conveying knowledge of surgical techniques, etc., that would otherwise be only slowly gained by the surgeons, medical students and others to whom it would be of value.

The company's export business, already operating at a £1-million-a-year turnover level is another important and expanding department located on the administrative floor. It is concerned with forty (mainly British Commonwealth) territories, in some of which stocks are held by distributors while to others are sent materials for processing.

The veterinary division has its own field force of representatives selling the nitrofuran and other specialities for which the company is well known, especially among poultry and pig breeders.

Altogether the new laboratories and works have cost around £1 million. They provide 164,000 sq. ft. of working area, of which 37,000 sq. ft. is allotted to research and development (which account for almost half the cost) and about 70,000 to production. Provision is made for expansion.

COMPANY NEWS

Previous year's figures in parentheses

H.E.B. PHARMACEUTICALS, LTD. —Mr. G. N. White, D.Sc., F.R.I.C., has joined the board.

ALBRIGHT & WILSON, LTD. — Mr. Bryan Topley has been elected deputy-chairman.

U.S. BORAX AND CHEMICAL CORPORATION.—The first quarter sales totalled $16,921,000 ($15,270,000). Earnings a share were 40 cents (33 cents).

BRITISH ALKALOIDS, LTD.— Final dividend 3·3d. per shilling share, making 4·5d. for year ended March 31, (4d). Subject to final audit net profit, after tax, was £41,973 (£41,394). Tax, £33,600 (£35,100).

NEWTON, CHAMBERS & CO., LTD., have made an offer for the acquisition of Ronuk, Ltd., and the board of Ronuk, Ltd., a private company, have recommended acceptance by the shareholders.

GEO. SALTER & CO., LTD.—Mr. F. Eric L. Bache has resigned as chairman because of ill health. He is succeeded by his nephew, Mr. R. Philip S. Bache, who has been managing director of the company since 1947 and will continue in that office additionally.

EUCRYL, LTD. — Mr. P. King, M.P.S., who joined the company as general manager in January 1954 and became a director in September 1955, has been appointed managing director. Mr. A. W. Lovell, F.C.C.S., the (secretary) has been appointed deputy managing director.

UNITED GLASS, LTD. — Ordinary dividend for year ended January 2 is maintained at 12½ per cent. on capital increased by a one-for-five scrip issue. Group net profit rose to £766,114 (from £544,327), after tax, £654,923 (£667,753) and depreciation, £528,590 (£492,683), etc. There is added tax over-provided previous years, £10,266 (£40,281).

P. H. GALLOWAY, LTD.—As a result of the company's take-over by Eucryl, Ltd., in 1957, many Preference shareholders of Galloway were left with small holdings in Eucryl 6 per cent. unsecured loan stock 1966-81. The board of Galloway is now making an offer of £80 per cent. free of all expenses to all holders of under £100 of that stock.

WRIGHT, LAYMAN & UMNEY, LTD.—Ordinary dividend is raised by 5 per cent. to 20 per cent. for 1959 with a final dividend of 15 per cent. A one-for-five scrip issue is also proposed. Group trading profits expanded from £77,219 to £121,183 from which is to be deducted directors' fees £3,625 (£1,600); depreciation, £11,484 (£10,500); and tax, £50,274 (£34,877). Income from investments amounted to £594 (£598).

JOHN DALE, LTD.—Group profit for 1959 is £390,630 (£132,780), after depreciation of £169,395 (£170,646). Net profit, £189,714 (£69,685), after tax, £183,558 (£45,902) and minority interest, £17,358 (£17,193). Ordinary dividend, 11 per cent. (same). Mr. L. R. Carr, (chairman) says that both turnover and profits for the first quarter of the current year are in advance of the same period of 1959. The forward order position also appears to be satisfactory and unless present trends are upset by unforeseen events, the directors look forward with confidence to the results for 1960. During 1959 the company merged with Metal Closures.

TIMOTHY WHITES & TAYLORS, LTD.—Mr. G. I. Rushton (chairman) in his statement accompanying the accounts for 1959, says that the turnover in both sales and National Health Service prescriptions in 1959 was again a record for the company. During the year seven new "stores" were opened and in continuance of their policy a further fifty were closed. The main expansion effort during 1960 is in connection with alterations and extensions to existing branches. So far as the current year is concerned the turnover up to date has been well maintained and Mr. Rushton sees no reason at present, in spite of a fall in dispensing, to anticipate that the results for the current year will not at least equal those for the past year. (For accounts see *C. & D.*, April 16, p. 433.)

ASSOCIATED CHEMICAL COMPANIES, LTD.—Group trading profit for 1959 was £1,266,675 (£1,156,536). After taking into account trade investments, etc., and depreciation, profit before tax was £776,036 (£906,490) and after tax of £355,166 (£425,060) the amount remaining is £520,871 (£481,430). Mr. M. J. C. Hutton-Wilson (chairman) in his review accompanying the accounts says that in the early months of 1959 there continued to be some uncertainty as to whether the check to the expanding economy suffered in 1958 had come to an end. As the year progressed, however, demand for the company's products became more buoyant and by the end of the year was running at a satisfactory level. Mr. Hutton-Wilson adds that it may be that some of the increased demand has been accentuated by customers requiring to build up stocks which had been allowed to run down in 1958 but, so far, the higher level has been sustained in the current year.

EVANS MEDICAL, LTD. — In his statement accompanying the accounts for 1959 the chairman (Mr. Ian Fergusson) says that about half of the 20 per cent. increase in 1959 group earnings was due to larger sales with the remainder the result of improved productivity and efficiency. Those factors were expected to continue and would, Mr. Fergusson believed, be sufficient to offset increased competition expected, particularly in certain European countries, and the cost of the shorter working week. While home sales increased satisfactorily, it was the overseas markets which enjoyed the larger proportionate growth in 1959. In both home and export markets sales of prescription specialities showed a "gratifying increase." The wholesaling division continues to expand but total sales of standard drugs of the company's own manufacture and of miscellaneous goods, which together complete the third division of the business, showed only a relatively small increase. It is pointed out, however, that the application of certain recommendations of the Hinchcliffe report might well lead to a halting if not a reversal of the down-ward trend in the consumption of standard drugs. More than half the £600,000 proceeds of the rights issue had not been permanently employed in the business as at December 31, 1959. A new virus unit for the manufacture of tissue culture vaccines is under construction and production is expected to start this year. No earnings from that project can be expected before 1961. Mr. Fergusson emphasises it is essentially an investment for the future and that a long period may elapse before current assets of the group amount to an adequate return is obtained. Net £2,102,189 (£1,433,487), investments £46,850 (£42,614) and fixed assets, after revaluation, £1,547,848 (£1,149,470), making a total of £3,696,887 (£2,625,571). Net profits, as previously stated (*C. & D.*, April 2, p. 367), increased from £188,768 to £235,496 in 1959.

BUSINESS CHANGES

THE firm of Haywood & Taylor, 124 Clay Lane and 14 Parkville Highway, Coventry, was converted into a limited company on May 1.

LILIA WHITE (SALES), LTD., have moved their offices to Charford Mills, Saltley, Birmingham, 8 (telephone: East 3831).

ALLOA GLASS WORK CO., LTD., Glass Works, Alloa, Clackmannans (a member of the United Glass group), changed its name to Alloa Glass, Ltd., on May 3.

GRATTAN & CO., LTD., Belfast, has advertised for sale its three remaining branches at University Road, Oldpark Road and Woodstock Road. They will continue to operate their aerated water plant at Great Victoria Street. Messrs. Grattan, who began business in 1825, disposed of their main shop at Corn Market, Belfast, for £70,000 in July 1959, for use other than a pharmacy. Since then the company has sold its Lisburn Road branch shop to the Belfast Co-operative Society which is carrying it on as a pharmacy.

BIRTHS

JONES. — Recently, to Catherine, wife of Eifion Jones, M.P.S., Ogwen Pharmacy, Bethesda, N. Wales, a son.

MARRIAGES

ADAMS—KERR. — At Lisburn Cathedral, co. Antrim, on April 28, Cecil Joseph Christopher Irvine, M.P.S.N.I., Bridgend House, Ballynure, to Martha Sheila Kerr, Lisburn.

ATKINSON—FAIRLESS. — At St. Paul's Presbyterian Church, South Shields, recently, Reve Atkinson, M.P.S., 28 Hepscott Terrace, South Shields, to Anne Fairless, 385 Sunderland Road, South Shields.

MAIR—SMELLIE. — At Silvertrees Hotel, Bothwell, on April 27, Alastair MacDougall Mair, M.P.S., Hamilton Street, Dumbarton, to Agnes Galbraith Smellie, M.P.S., Allness Street, Hamilton.

WALSH—BURNELL. — At Chapelizod Church, Dublin, on April 26, Michael Walsh, Clare, to Joan Burnell, M.P.S.I., Glenaulin Park, Chapelizod, Dublin.

DEATHS

BEER. — On April 25, Mr. Vyctor Stuart Beer, M.P.S., 5 Polsloe Road, Exeter. Mr. Beer qualified in 1913 and for nearly forty years, until his retirement in 1957, was manager in Devon for Holman, Ham & Co., Ltd.

BUCHANAN. — At hospital on April 13, Mr. Frederick William Buchanan, M.P.S.N.I., 33 Eglinton Street, Portrush. Mr. Buchanan qualified in Dublin in 1921 and in Northern Ireland in 1927. In 1936 he commenced business in Portrush, which he carried on until his death. He is survived by his wife, who is also a member of the Pharmaceutical Society of Northern Ireland.

COSTELLO. — On April 21, Mr. Joseph Francis Costello, M.P.S.I., Upper Abbeygate Street, Galway. Mr. Costello was educated in Clongowes Wood College and qualified in 1921. He was vice president of the Council of the Pharmaceutical Society of Ireland in 1934–35, and president the following year. He gave extensively of his wide experience and professional knowledge for the betterment of pharmacy. A prominent figure in the public life of Galway he had the distinction of being mayor from 1937 to 1950, and although much occupied by municipal responsibilities he still continued to take an active interest in all pharmaceutical activities. He was first elected to Galway urban council in 1924 and he continued to hold the office uninterruptedly until his retirement from public life in 1950. He was also chairman of the Board of the Connacht Tribune Printing & Publishing Co. and was a former member of the board of Coras Iompar Eireann (Irish transport organisation). Mr. Costello was a director of a number of Galway industries, being for many years a member of Galway harbour board. He is survived by his wife, Dr. Mai Costello, formerly Dr. Mai Kennedy of Banagher, and by three daughters—Mrs. W. B. Allen and Misses Josephine and Sheila Costello.

Mr. John Gleeson, a member of council and a past-president of the Pharmaceutical Society of Ireland, writes:—" Joe Costello, whom I had known for over a quarter of a century, was a man of very noble character and high ideals. Of quiet and gentle disposition, he was a most charming personality. As president of the Pharmaceutical Society of Ireland during the Diamond Jubilee year of 1935, he presided over our deliberations with great dignity. At a time when few pharmacists showed any inclination to interest themselves in public affairs, Joe Costello took a prominent part in the civic life and in the cultural and industrial organisations of his native city. He was elected Mayor of Galway for fifteen successive years and, until his death, was chairman of Galway Race Committee. Pharmacy is the poorer for his death and we, his colleagues, were privileged to have known him and are saddened by his passing."

HILL. — Recently, Mr. Frederick William Hill, M.P.S., Busbridge Lane, Godalming. Mr. Hill qualified in 1921 and for the last twenty-seven years was a manager in Godalming.

SEMPLE.—On April 8, Miss Jessie Semple, M.P.S., 7 Carillon Road, Glasgow, S.W.1, aged seventy-one.

SLATER.—On April 23, Mr. Vincent Slater, M.P.S., 68 Eskrick Street, Bolton. Mr. Slater qualified in 1924 and had been in business in Bolton for 35 years.

SMITH.—Recently, Mr. John Barnett Smith, M.P.S., 570 London Road, Isleworth, Middlesex. Mr. Smith qualified in 1907.

THONGER.—On April 15, Mr. Cyril Thurland Thonger, 87 Oakfield Road, Selly Park, Birmingham, aged 84 years. Mr. Thonger was the founder and director of the University Drug Co., Ltd., 568 Bristol Road, Bournbrook, Birmingham.

YOUNG.—On April 26, Mr. George Henry Young, managing director, McClure, Young & Co., Ltd., Standard Road, Park Royal, London, N.W.10. Mr. Young was the president of the London Chemists' Golfing Society. *Mr. G. A. R. Young* writes: "It is hoped that all the friends who have expressed their sympathy will accept this as an acknowledgement of sincere thanks for their kind wishes."

PERSONALITIES

MR. MERVYN RONALD TICKELL SCOTT, pharmaceutical chemist, 8 Market Place, Wantage, Berks, is seeking re-election to the Wantage urban district council at the forthcoming elections.

MR. R. H. ROWSON, F.P.S., Harrow, has been appointed vice-chairman of the Middlesex executive council. Mr. Rowson is a past-chairman of the Middlesex pharmaceutical committee, and has been a member for twenty-six years. He has been a member of the pharmaceutical service committee and of the executive council since 1947, and was formerly a member of the Middlesex insurance committee. The appointment takes effect immediately.

DR. T. D. WHITTET (chief pharmacist and lecturer in pharmacy, University College Hospital and Medical School, London, W.C.1) recently visited Spain at the invitation of the Royal Spanish Academy of Pharmacy, of which he is the only British member. Dr. Whittet was invited by the Academy to lecture on his work on pyrogens and by the British Institute to talk on "Pharmacy in the British Health Service." He stayed with Professor Bustinza and during his stay visited many hospitals and faculties. Dr. Whittet was also invited by the Portuguese Pharmaceutical Society to lecture in Lisbon, where he toured the city hospitals, and the new Lisbon University Hospital, possibly the foremost in Europe.

Queen Mother at Brunswick Square

CEREMONIAL OPENING OF THE SCHOOL OF PHARMACY

AN event of unique importance in the world of pharmacy occurred on April 27, when Queen Elizabeth the Queen Mother unveiled a plaque symbolising that the School of Pharmacy, University of London, was now officially opened.

Her Majesty was present in her capacity of Chancellor of the University. She was welcomed to Brunswick Square by Sir Harry Jephcott (chairman of the School Council).

Sir Harry said the school bore unmistakable witness to the importance which the Pharmaceutical Society had always placed upon education. It had been founded by the Society within a year of the Society's own formation, and was at that time the only institution in the country providing tuition in practical chemistry. Its laboratories had preceded by several years those at University College, and the first professor of chemistry at the School of Pharmacy subsequently became first holder of the chair of practical chemistry at University College.

Ties With the Society

Not until 1925, after the establishment of the degree of Bachelor of Pharmacy by the University of London, was the school formally recognised as a School of the University. Even so, the Pharmaceutical Society remained financially responsible for its maintenance until the end of the 1939–45 war. Sir Harry recalled that the building in which the School was housed had been planned in 1935 as a means of providing better accommodation for the School and for the Society itself. Upon the outbreak of war in 1939 work upon it had been stopped, and after the war the Society found it impossible to shoulder the burden of financing the School. The University was approached for a complete revision of the financial relationship, and the University Court, with help from the University Grants Committee, provided the money for both recurrent and capital purposes. The School was incorporated in January 1949 as an independent entity with its own Governing Body, upon which seats were held by representatives of the University of London, the Pharmaceutical Society, the academic staff, and co-opted persons. In 1952 Queen Elizabeth II granted the School a Royal Charter of Incorporation.

The Queen Mother then addressed the assembly which included, in addition to the students of the School, a representative gathering of pharmacists distinguished in many branches of the profession. Her Majesty said: "I thank you, Mr. Chairman, for your kind welcome. I am indeed pleased to be here with you today to perform the opening ceremony of this new building for the School of Pharmacy. Started as it was in 1938, this is the 'oldest new building' in London, and you must be very happy that, at long last, you are able to take possession of the promised land and to enjoy the wonderful facilities which it provides. I would like to congratulate the School on the progress which it has made since its foundation 118 years ago and, in particular, since 1925 when it became a School of the University. For it can be justly proud of the influence it has exercised on pharmaceutical education. In this century the education of the pharmacist has changed from a meagre academic course, followed by a long apprenticeship, to a full honours discipline in the University, augmented by a brief period of practical training. This change was essential in order to keep pace with the metamorphosis of pharmacy itself from an art—or craft—tinctured with a *soupçon* of mystery—to a profession firmly based on sound scientific principles. No doubt there are some who regret the disappearance of old remedies with such romantic names as dragon's blood, but there is still a touch of magic in the drugs which modern medical science, with the indispensable aid of the pharmacist, has evolved in the never-ending fight against disease.

The Pharmaceutical Society deserves our warmest thanks for the part it has played in the development of the School. It has every right to be proud that the seed it sowed so many years ago has grown into such a sturdy plant, and I hope that the Society will continue to show its interest and give its support in the future. The School makes an important contribution to the life of this country, as is proved by the number of its graduates who are employed in the pharmaceutical and chemical industries; in fact, the demand for their services far exceeds the supply. In the realm of research, too, the School has always been most active and the value of its work is recognised throughout the world. Members of the pharmaceutical profession have a double satisfaction in that, while they are following the career of their choice, they can at the same time provide a valuable service to mankind. Not all professions are so fortunate and I hope that, in the training which is given here, this dual purpose will always be kept in the forefront.

As Chancellor of the University, it gives me great pleasure to declare this building, designed as it was a quarter in it I wish all success and happiness in their labours."

A speech of thanks to the Chancellor was made by the Dean (Professor W. H. Linnell) who said that the building, designed as it was a quarter of a century ago, did not, despite all its facilities, provide for current demands. Each year 400 applicants clamoured for the forty-eight undergraduate places available. The question of further expansion was causing predatory eyes to be cast on premises in the neighbourhood. Although the University of London and the University Grants Committee had accepted the main responsibility for the School, it was right to give a reminder of the debt which the School owed to its original parent: the Pharmaceutical Society of Great Britain. The Dean made reference to the important part which his predecessor (Professor H. Berry) had played in the negotiations between the University and the Pharmaceutical Society.

Afterwards the Queen made a tour of the building, including a special exhibition illustrating teaching and research functions of the School. After she had completed her tour the School and exhibition, parts of which are pictured opposite, were laid open to the inspection of those who had attended the ceremony.

IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

THE question whether additional safety requirements were needed relating to the conveyance of dangerous substances by road was being kept under review, stated Mr. D. F. Vosper (joint under-Secretary of State, Home Department), in a written answer to Mr. S. S. Awbery on April 27. The Home Office was co-operating with the chemical and transport industries and preparing a scheme for the marking of vehicles carrying dangerous substances.

Weights and Measures Legislation

Mr. R. Maudling (President, Board of Trade) told Mr. G. Darling on April 28, that he very much hoped that it would be possible to introduce a new weights and measures bill during the next session. The delay was due to prolonged and complicated consultations with the interests involved and the pressure on Parliamentary time had been considerable.

Shopping Habits

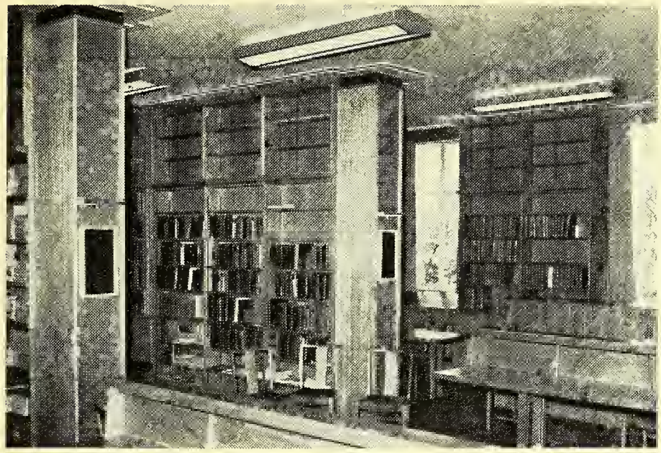
Mr. R. Maudling told Mr. G. Darling on April 28 that although the report on the survey of shopping habits provided some information of technical interest it did not contain sufficient conclusions of general interest to justify publication.

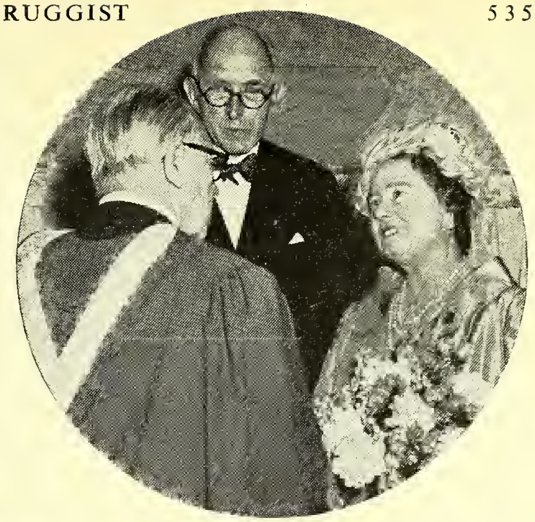
Control of Credit

Immediately after question time on April 28, Mr. D. Heathcoat Amory (Chancellor of the Exchequer) announced restraints on hire purchase credits (see page 528).

Transport of Isotopes

Following a question by Mr. Hector Hughes on May 2, Mr. Derek Walker-Smith circulated a statement on the obligations laid down for the guidance of persons using or transporting dangerous isotopes, and details of the penalties for non-compliance. In it he stated that the code of practice for the protection of persons exposed to ionising radiations in N.H.S. hospitals, published in 1957, was under revision and the similar health and safety problems in research laboratories other than hospital research establishments were also being considered.

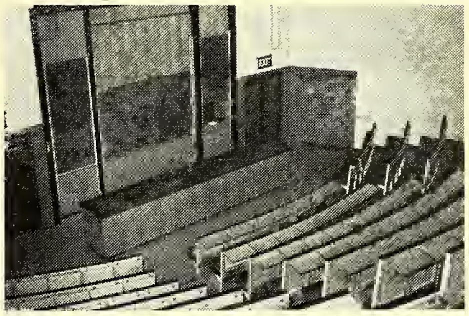


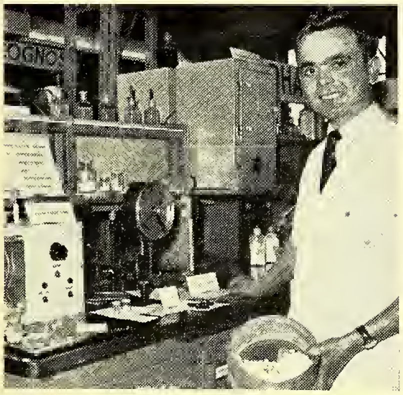


H.M. the Queen Mother in conversation with the chairman of the School's Council (Sir Harry Jephcott) and the Dean (Professor W. H. Linnell).

Final stage of the occupation gave the school its library (top left) and a new lecture theatre (left) for the first-year students.

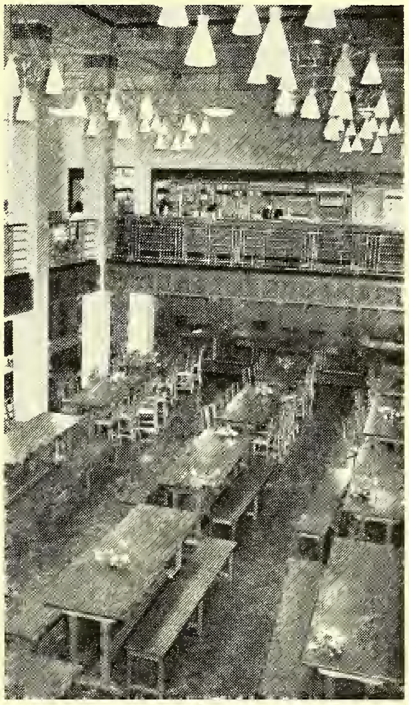
A C. & D. CAMERAMAN AT THE ROYAL OPENING OF "THE SQUARE"





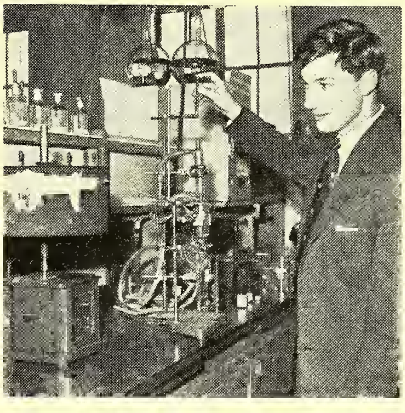
In a fourth-floor exhibition specially staged for the opening, third-year student M. D. J. Day shows his harvest of freshly punched tablets.

Nine-year-old Miss Hilary Briggs (daughter of lecturer in pharmaceutics Dr. Alan Briggs) finds fascination in the pests which revision student Harold Fenton points out in drug specimens.



The galleried refectory in which Her Majesty joined the students for afternoon tea after a tour of inspection of the building.

Revision student S. O. A. Franklin from Nigeria indicates an essential element in a bacterial-count display.



Third-year student B. W. Aldridge explains the technique of recording measurements of pharmacological activity in a drug.

The students have now, adjoining a handsome common room, their own bar.

CANDIDATES FOR ELECTION TO THE COUNCIL

Who they are and what they stand for

The statements of Messrs. A. Aldington, J. C. Bloomfield, A. R. G. Chamings, S. Durham, T. W. Fisher, P. G. Flood, H. S. Grainger, J. H. Graves, and G. Hinchliffe were given last week (pp. 502-04).

HOLLAND, KENNETH

QUALIFIED in 1938 and, after a short period of hospital pharmacy, took up a retail managerial post until 1941, when he commenced five years' service in the Royal Air Force. From 1946 to 1949 a representative in Essex for Pharmaceutical Specialities (May & Baker), Ltd. Today a director of Macarthys, Ltd., and of Macarthys (Wholesale Chemists), Ltd. A member of committee and past chairman and treasurer, Romford and District Branch of the Pharmaceutical Society.

POLICY: As a pharmacist engaged in wholesale distribution I am in daily contact with colleagues engaged in retail, hospital and manufacturing practice. I have always felt that the interests of all pharmacists are largely the same—the profession and practice of pharmacy. It is thus from the point of view of the whole profession that I must express a strong feeling of alarm at current public criticism of the cost of drugs. Such criticism is not always justified when related to research expenditure, etc., but is only too true where ill-conceived or over-elaborate formulations are foisted on to the public by manufacturers who use imagination in their sales departments and who carry out research only in their imagination. Some time ago I had the honour of proposing at a Branch Representatives' meeting that the Council should seek co-operation from medical and other interested organisations in setting up a voluntary committee that could examine all new products presented to it and could give a mark of approval based on their originality of pharmacological or pharmaceutical approach, and on the value of clinical evidence presented. That motion, presented in the name of Romford and District, was narrowly lost. A year or so ago a similar motion was carried. If the Council were active in initiating some sort of joint action in that way it would do more for our prestige (on a national scale) than has ever before been achieved (to say nothing of an inevitable reduction in the variety of goods on the dispensary shelves). Talking of prestige, a Public Relations Committee has sat only for one year and has not had time to issue a report—even an interim one. I still urge the need for the expert assistance of an individual or firm properly qualified in public-relations work. Such an individual or firm could help pharmacy to present its case to Government and people *via* Press, television, radio, etc., and also would endeavour to correct those false statements and misconceptions about our profession that so frequently appear. The need for such action is most pressing. As I have stated before in these columns on previous similar occasions, I am still not in favour of any dilution of our profession by those holding lower or different qualifications from those already required for membership. Unlike some others, I have had no "second thoughts" re assistants in pharmacy. I still detest the drug-testing scheme which, though I am not personally affected, nevertheless, by insulting the integrity of our profession, insults us all. If I am elected as a Councillor, I shall most certainly press strongly for Council to lose its present weak attitude to the scheme. The drug-testing scheme should be abolished forthwith. Lastly, may I ask all who read these few words to return their completed voting papers as early as possible and to urge all colleagues and friends who are also members not to be apathetic but to vote.

HOWELLS, WILLIAM SPENCER

QUALIFIED 1910. A proprietor pharmacist. A member of Council, treasurer and past-president. A member of the Statutory Committee. A past-chairman of the Thames Valley Branch, Pharmaceutical Society. Chairman, Surrey Pharmaceutical Committee. A former president of council, Proprietary Articles Association.

POLICY: The Society's activities cover a wide field and in estimating the value of the work of the Council regard should be had more to the results of this work as a whole and over a period of time than to what has been done or not done on particular issues at particular times. During my twenty-four years as a member of Council I have seen and taken part in many changes designed to further the cause of pharmacy in the broadest sense. Other pharmaceutical organisations have specialised interests to cater for, and the Society is glad to co-operate with them in matters of common concern, but in view of the need to act in the interests of the membership as a whole the Society's efforts in improving conditions are more of a general than of a specific nature. Inevitably much of the Society's work does not show in results that can be directly related to it, but I am satisfied that the Society's influence is continually expanding and the success of its policies is reflected in a growing appreciation of the part which pharmacy plays in the life of the nation. It cannot be too strongly emphasised that the economic advantages which qualifications as a pharmacist should entail can only be secured by the observance of high standards of professional knowledge and conduct, and it is vitally important that a progressive policy in those respects should continue to be pursued.

MARTIN, THOMAS PATRICK

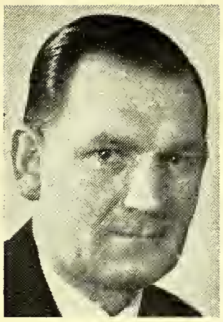
SERVED apprenticeship in Cardiff. Qualified from the Welsh College of Pharmacy, and gained experience with the late G. W. Evans, Hammersmith, later managing for Timothy Whites & Taylors, Ltd. In business on own account since 1934. A past-president of the Cardiff and District chamber of trade. Served on that chamber's Welsh Area Council. A past-president, Cardiff pharmacists' Association and a committee member, Cardiff Branch of the National Pharmaceutical Union. Secretary to the Cardiff Pharmaceutical Committee and a member of the Cardiff Executive Council, serving on some of its committees. Formerly pharmaceutical representative on the governing body of the Cardiff College of Technology and Commerce.

POLICY: In accepting nomination as a candidate for the Council election, I do so as a retail member and as a representative of Welshmen and of Wales. There are today about 12,000 retail businesses in private hands. Our future and the future of the Society itself depends upon their continued prosperity. As one of that number, my interest is obviously for its future welfare. That does not mean that I would be oblivious of the problems of my colleagues in other branches of the profession. I am in favour of continued improvements in our standard of education—not only to keep abreast of new technological developments but also to maintain the standing of pharmacists in relation to the allied professions. It is obvious that we must make adequate provisions for a continuous flow of pharmacists to the retail side of the profession. I am concerned that the number coming forward at present and in the immediate future is insufficient to maintain the service we aim to provide. Education must be the servant of the Society, not its master. I believe that we must include a course of business training in the curriculum; that is essential if we are to compete with modern business conditions. Practical training must be integrated into the course, as theoretical qualification, however technical, is no answer to our needs. We must retain the pharmaceutical chemists' diploma, otherwise the various universities will decide the syllabus and the Society will become purely a registering body. I also think that we must have a more effective public-relations policy as, in my opinion, the present method is too slow and too weak. A permanent feature of public-relations policy must be the education of the public that the pharmacist is the only trained and qualified person fitted to supply medicines, and persuasion of the public that it is in their own interests that they should turn to pharmacists for medical supplies.

McNEAL, JAMES FALLOWS

QUALIFIED 1921. Proprietor pharmacist. A member of Council and past vice-president. A past-chairman of the Benevolent Fund and War Aid and Public Services Committees. A past member of the National Pharmaceutical Union Executive. A past-chairman and secretary, Harrow Branches of the Pharmaceutical Society and National Pharmaceutical Union. Vice-chairman, Herts Pharmaceutical Committee. A member, Herts Executive Council and its Medical Practices Committee. Representative of the Society on the

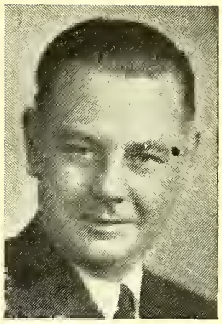
W. S. Howells



T. P. Martin

J. F. McNeal

H. Ridehalgh



H. Williams

British Social Biology Council and a member of its Executive. A member of the liaison committee with the British Medical Association. A member of the History of Pharmacy, Veterinary, Benevolent Fund, War Aid, Education and Public Services Committees.

POLICY: Our Society was formed to protect the business of the chemist and druggist and it was envisaged that the sale of drugs and medicines would be eventually controlled and restricted to those qualified by law. Recent events have shown how far from that ideal we have fallen after over a century of service to the public. The sale of Central Nervous System drugs would have been under qualified control and a directive from the Council would have been sufficient to ensure care in all sales. Now legislation has to be instituted to restrict sales to prescription. The price we have to pay to protect the public from unqualified sales of C.N.S. drugs is that we cannot supply them ourselves except on the direction of a medical practitioner. That appears a peculiar position for a profession which claims to be the expert on drugs. We must avoid being crushed between unqualified sale of drugs and sales by prescription only if we are to survive as a profession. In both cases we lost control over the sale of drugs and devalue our qualification. C.N.S. drugs have shown what dangers lie ahead and have provided us with a platform on which to state our case for legislation. I would advocate a full investigation into the practice of all aspects of pharmacy to decide what legislation is necessary; to define the profession of pharmacy, and to place the results before a Conference of the Society. I would support any policy which maintains good public relationship. The pre-war practice of supplying full Council reports is long overdue. It is impossible in the space at my disposal to provide particulars of the work I have done on your behalf, but I would ask for a renewal of the confidence you have always extended to me. Whatever your views may be, I would ask every member to record his or her vote. Only a strong Council with a mandate from its members could undertake such a heavy responsibility.

RIDEHALGH, HARRY

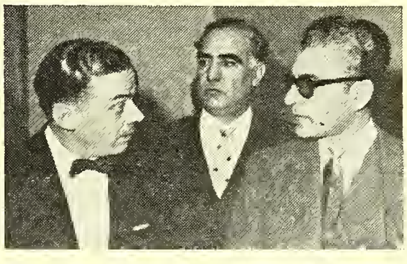
Born in Great Harwood, Lancs, fifty-two years ago. Qualified from the South of England College of Pharmacy in 1931. Managed shops for Savory & Moore, Ltd., for several years, before buying his own business in Bournemouth fifteen years ago. Three years ago purchased a second business. Has always interested himself in local pharmaceutical matters, and was secretary of the Bournemouth Branch of the Pharmaceutical Society for eight years, its chairman for two years. During his term of office as chairman was prime mover in the inauguration of the Southern Regional Conference (Bournemouth, Portsmouth and Southampton Branches). Is at present chairman of the Bournemouth and Poole Branch of the National Pharmaceutical Union, chairman of the Bournemouth Pharmaceutical Committee, a member of the local Executive Council. Was chairman of the Local Committee of the British Pharmaceutical Conference, 1959.

POLICY: Apathy is a sluggishness of mind which makes men content to let events take their own course, and it's high time we put an end to it. We need some new, forward-thinking in London. We need crisper, more positive public relations. The dismal "C.N.S." muddle did not enhance the reputation of the Society, nor of its members. The statements from the Council were sterile, futile and grandmotherly. The situation was finally resolved by the action of a daily newspaper and a Member of Parliament. I take this as an indictment of our own inert public relations, and what was our M.P. secretary doing? We need a much closer liaison between London and the individual member. Important matters should be discussed at branch meetings before final decisions are made by the Council. We should have much fuller reports of Council meetings in the Society's journal. Until members are taken fully into the confidence of the Council, apathy will prevail. We need a new spirit in pharmacy. In some way we must inculcate an *esprit de corps* among members. The journal could do much more to reduce apathy. I still say we should have a "Branch of the Month" feature to stimulate a spirit of friendly competition among Branches. The Council should pay more attention to recruiting for pharmacy. The post-graduate apprenticeship is an integral part of the curriculum and a multiple firm is running it. That should not be so. Schemes for the limitation of pharmacies should be investigated. All branches of pharmacy—retail, hospital and industrial—should be protected and nurtured at all times, and everything possible done to improve their lot. I am opposed to the registration of technicians. No good can come from such a move, and it may well cause a lot of mischief. The retention fee for pharmacists over seventy years of age should be abolished. Use your vote.

WILLIAMS, HERBERT

Apprenticed at Bala, North Wales. Qualified in 1929 from the Liverpool School of Pharmacy and had retail experience in Manchester, Birmingham and London and experience with multiple stores, with manufacturing and wholesale chemists and as a representative. Was manager of a retail pharmacy in Reading for about five years and is now joint director, with his pharmacist wife, of four pharmacies in Reading. Was secretary of the Reading Branch of the Society, 1950–59, becoming Branch chairman in 1959–60. Secretary, Berkshire Branch, National Pharmaceutical Union and Reading Pharmaceutical Committee. A member, Finance and General Purposes Committee, Reading Executive Council; a past-treasurer and present vice-chairman, Reading chamber of commerce and trade; and a member of the Reading borough council, serving on the health, education, cultural, town-planning and finance committees and chairman of three.

POLICY: My comprehensive experience of pharmacy in varied spheres could be of use in the Council's deliberations as would my extensive experience of committee work. I feel that the Council could do more to protect the livelihood of all pharmacists, even within the limits of our present Charter, and should do far more to co-ordinate the work of various pharmaceutical organisations. Steps to be taken to increase entries to the profession should have the utmost priority, as should our public-relations propaganda. Most members know that I am a strenuous and conscientious worker for the welfare of all engaged in pharmacy and that I have always strived to raise the prestige of pharmacists. I have the time, ability and desire to serve you.



Mr. W. C. Caswell, M.P.S. (Allen & Hanburys, Ltd.), photographed with the Prime Minister of Persia (Dr. Eqbal) and His Imperial Majesty the Shah at Darou Pakhsh, Teheran, Persia, recently.

ACHIEVEMENTS OF THE INDUSTRY

Association's president and Parliamentary Secretary consider its problems

THE annual meeting and annual dinner of the Association of Pharmaceutical Industry, held in London on April 26, provided opportunity to the Association's president (Mr. E. D. Carey) to bring under review both its achievements and its problems, and for the Parliamentary Secretary of the Ministry of Health (Miss Edith Pitt, O.B.E., M.P.) to indicate the Department's current attitudes on both.

Industry's Part in Progress

At the dinner THE PRESIDENT introduced Miss Pitt with a brief outline of her political career, going on to speak about the achievements and problems of the pharmaceutical industry. Everyone who knew anything at all about medicine and pharmacy, he said, recognised that the industry had played a magnificent part in the great advance in therapeutics that was one, if not the finest, achievement of the present scientific age. At the beginning of a new decade an even greater rate of progress could be looked forward to with some confidence. It would come from the combined efforts of the medical and allied professions and the research workers in the universities and other institutions and in the industry. The industry's own research effort had been increasing year by year, reaching an expenditure in 1958 of £5 millions. It was only right to recall that the National Health Service benefited also from the large sums spent on research in the United States, Switzerland and other countries whose pharmaceutical companies had manufacturing subsidiaries in Britain. Co-operation between the industry and research workers in the universities, medical schools and similar institutions was no new thing. Recently arrangements had been agreed in principle between the Medical Research Council and the Association that should give opportunities to companies with the necessary research and development facilities in this country—and the expertise—to join in developing projects of potential industrial importance originating in the Council's laboratories. Manufacturers in the industry welcomed the opportunity to place their knowledge, experience and resources at the disposal of the Council while continuing independent research in their own chosen fields.

The industry did not in the least mind constructive criticism, declared Mr. Carey. Members were encouraged by the Hinchliffe Committee's conclusion that the industry was playing an all-important part in the development of the National Health Service and the export trade, and the Association had willingly joined in discussions with the Ministry of Health and the Department of Health for Scotland on the recommendations of those committees. It was now engaged with the Health Departments in a review of the voluntary price-regulation scheme (for medical speciality products), which would be ending its initial three-year trial period in June. Manufacturers were confident that their prices were fair and reasonable, and knew only too well that they were in active competition with each other, both at home and abroad. It was a necessary condition of being paid for National Health Service sales out of the public purse, however, that they and the Health Departments had to satisfy Parliament that the prices of drugs were fair and reasonable. It had been suggested that the voluntary price-regulation scheme had not so far been a success. The Association believed that view to be based on inadequate evidence and on misunderstandings, both of the object of the scheme and its results. For example, calculations of savings produced by the scheme took no account of price reductions made voluntarily as a result of production economies or of the ever-present force of competition. In no other comparable field had such price restraint been shown as with pharmaceutical preparations. Between 1954 and 1959 the price index of all manufactured products rose by 11·4 per cent., but the rise for pharmaceutical preparations was only 1·4 per cent. Year by year the industry had been increasing its expenditure on research and increasing its export trade, and in 1959 had made record export sales of £40 millions: more than a quarter of its total output. The real success of the voluntary price-regulation scheme was not to be measured by calculated savings to the Exchequer but by its total and long-term effect on the industry's contribution to the national health and economy. The Association had welcomed an assurance from the Health Departments that the scheme was not regarded as a means of reducing prices from a fair and reasonable level. The operations of modern pharmaceutical enterprise were finely balanced and highly susceptible at all times to the effects of rapid scientific developments, to the pressures of competition, and to the influences of parliamentary and professional opinion. To interfere with one activity might well prejudice the enterprise as a whole. Members of the industry were content to be judged on their overall achievements.

In her reply, MISS PITT acknowledged the truth of Mr. Carey's claim that all concerned with pharmacy and medicine knew what a magnificent job the industry had done.

Economies Due to the Industry

There could be no doubt that the new tools which the pharmaceutical industry had put into the hands of doctors had helped greatly in curing disease, and in reducing the period of treatment. Benefit had possibly accrued to the economy in the reduction in time lost from work, in reduced expenditure on sickness benefit, and in relief to the hospital services. The industry had, of course, increased greatly in size and importance, and had a proud record of mounting exports. That called for great praise, especially in view of the increasing difficulties which it had to meet in the export markets. Miss Pitt hoped manufacturers would intensify their efforts and go on to new records.

Britain had always, she said, sought to be in the forefront of scientific progress, and she was heartened to see the quickening tempo of research. The president had referred to the industry's recognition that public examination of its affairs was to be expected when the largest single customer paid the bill out of the public purse. They must expect that interest to increase, but they would know that their colleagues in other countries were now subject to equally searching—perhaps even more dramatic—criticisms. That pointed to the paradox that the better the service it gave the more scrupulous it must be in avoiding any suspicion that manufacturers were exploiting their achievements unfairly. She was glad, therefore, to see the emphasis laid in the "Code of Sales-promotion Practice" on the need to exercise restraint in sales-promotion activities.

Ministers knew that research must be paid for and knew that the complex products of research were often intrinsically expensive; they recognised that manufacturers were entitled to reasonable rewards; and they accepted that prices should reflect the industry's proper needs and secure a continuing incentive to research. One important thing the voluntary price-regulation scheme had done was to give the Departments opportunities of close contact with members of the industry and through them the Departments had gained much insight into the industry's problems. Yet it seemed to Ministers that there was still room for price reductions by some manufacturers without reducing rewards below a fair and reasonable level or damaging research and development potential. She urged the industry to be rigorous in looking for opportunities to pass on production economies.

Annual Report

The annual report and year-book, 1959–60, of the Association, published the same day, reviews the discussions that have taken place with the Ministry of Health and Department of Health for Scotland over the recommendations of the two committees on prescribing costs. It points out that negotiations are proceeding with the Ministry of Health for continuation of the voluntary price-regulation scheme, and gives the full text of a statement sent to Members of Parliament on February 27 upon the report of the Comptroller and Auditor General on the Civil Appropriation Accounts, 1958–59. It mentions that a statement of the labelling principles to be followed in providing supplies to hospitals has been circulated to all members, and that the Association has accepted an invitation to submit evidence to the Working Party set up to review pharmaceutical legislation.

United Kingdom exports of drugs and medicines in 1959 reached the peak figure of £40·1 millions; imports in the corresponding categories fell to £4·4 millions. The report gives notes on the various export markets, supplementing them with an account of relations with members of the European Free Trade

Association. It includes statistical tables on production and employment, exports and imports, National Health Service prescriptions and expenditure, and wholesale price-index numbers.

Many of the points made by Mr. Carey in his address at the annual meeting were publicised in 11-in. double-column displayed advertisements by the Association in the national Press on April 26.

Officers for 1960–61

At the annual meeting on April 27 the Council elected Mr. H. W. Palmer (managing director, Glaxo Laboratories, Ltd.), *President* 1960–61 and Dr. D. E. Wheeler (managing director, the Wellcome Foundation, Ltd.), *Vice-president.* Mr. G. T. Morson, M.C., was re-elected *Honorary Treasurer.*

FORUMS ON PHARMACEUTICAL PACKAGING

Discussions on glass, aluminium, tin, paper and plastics

A PLEA for standardisation of collapsible tubes was made by Mr. J. Anderson (Allen & Hanburys, Ltd.) at the first of two forums held in connection with the pharmaceutical packing display at the Packaging Centre, London (see *C. & D.*, April 16, p. 431). The first forum was held on April 11, the subject being "Glass, Aluminium and Tin in Pharmaceutical Packaging." Dr. K. R. Capper (editor of the scientific publications of the Pharmaceutical Society) presided.

Three speakers introduced the subject. MR. B. E. MOODY (United Glass, Ltd.) claimed for glass a unique position in that it had remained one of the most important packaging materials throughout the whole recorded history of the subject. The earliest glass bottles, made 3,000 or more years ago, were nearly all used for medicines, perfumes and cosmetics. In mediæval times in Britain glass was always regarded as the standard material for medicine bottles. The long history of glass was in one way a disadvantage, because there was a tendency for some to regard it as "old-fashioned." It was true that in some fields glass had had to give way to some extent to other materials, particularly where a flexible container was needed, but in general, and for pharmaceuticals in particular, there was no doubt that the technical advances in glass technology over the past fifty years enabled glass to maintain its important position *vis à vis* competitive material.

Mr. Moody enumerated the basic properties of glass from the pharmaceutical view. Most important was its chemical inertness; then came hardness, smoothness of surface, complete impermeability, and ability to withstand high temperatures.

The first requirement to consider in choosing a glass composition was to have a material that could be effectively manipulated when hot. There were many possible compositions, all of which were "remarkably inert" to the action of solids, liquids or gases. So, for most applications, any of the common compositions would be satisfactory for pharmaceutical containers. There were, however, some special applications where the requirements were more stringent.

The three properties mentioned explained why a newly formed glass container was about as near to complete sterility as could ever be achieved. The high melting and forming temperatures ensured that there were no organisms in the container to start with, and the general atmosphere in and around the melting furnace and forming equipment was also generally of high quality from the bacteriological point of view. So the air that was sucked into the hot container as it cooled during annealing did not bring any harmful matter with it. Those properties were also important from a cleaning or sterilising point of view. The inside surface of a blown container was of optical smoothness, having been formed by air pressure only, and that was obviously the easiest type of surface to clean. Its hardness was an additional help, and the chemical inertness meant that usually there was little chemical or physical bonding force between the glass and any foreign matter in contact with it.

Other properties of glass were transparency and the possible use of colours for identification purposes (e.g., poison botttles), or for the protection of contents from photochemical effects. Brittleness was also a property of glass, said the speaker. "Glass is rather breakable." However, that could be turned to advantage (as with ampoules) and research was going on to find an unbreakable glass container. Mr. Moody spoke briefly on the chemical properties of glass, referring his audience to THE CHEMIST AND DRUGGIST of February 6 (a copy of which is on show at the display) for details of the process of sulphating glass.

Commenting on design and usage, he said that most bottle designs came about as a result of three factors: tradition, technical requirements, and visual requirements (æsthetic and commercial). He believed that because of the length of time bottles had been in use, many designs had been influenced too much by tradition and not enough by the other two factors. "I think the traditional medicine bottle is a good example of that because, apart from the traditional appearance, it has little to recommend it." He thought, however, that there was clear evidence that the balance was swinging away from the traditional ideas towards the functional or æsthetic.

MR. E. ELLIOTT (Aluminium Development Association) said that aluminium had been a "commercial" metal only for fifty years. The packing applications of aluminium had multiplied more rapidly than those of any other material and now represented over 15 per cent. of the wrought aluminium in the country. Production of aluminium had doubled every ten years since 1900, and greater productive capacity was still being introduced. There was no shortage of aluminium, nor was there likely to be. The two types most generally used were pure (of more than one grade) and 1¼ per cent. manganese aluminium alloy, which was slightly stronger than the pure material. The general forms used in packing were sheet and strip, foil, and impact extruded slugs.

One of the most important properties of aluminium was its specific gravity: it weighed only about one-third as much as steel and one-quarter as much as lead, and it combined that lightness with strength. Other important and favourable properties were its formability, ease of joining with other materials to form laminates, impermeability, and its safety when used for packing items that were to be taken orally, as it was non-toxic and did not produce unpleasant odours or tastes. It also had interesting thermal properties, it was a good conductor of heat, and was highly resistant to corrosion because of the naturally occurring thin oxide film on its surface. Some chemicals did, however, attack aluminium, and tests should always be carried out before it was used as a packing material. Aluminium was attractive and could be decorated by a number of processes.

MR. W. R. LEWIS (Tin Development Association) said that the chief virtues of tin were its low toxicity and its ductility. Its biggest disadvantage was its proneness to oxidation. Also it was prone to react with weak acids and alkalis, though internal lacquering or enamelling of cans could overcome that problem. Tin foil, though heavier and comparatively more expensive than aluminium foil, was useful where a special quality was required. Tin coatings could be put on lead tubes—and indeed, tin plate was the main packing material. Hot-dipped tin plating could be deposited as little as 80 millionths of an inch thick, but electrolytic plating—introduced during the 1939–45 war—could go to even 20 millionths. Tin could withstand great pressure—an advantage recognised by pressure-pack manufacturers—and also lent itself to mass production. It also lent itself to deep drawing, so that a wide variety of shapes could be produced. And because of their strength tin cans could withstand considerable "buffeting" on high-speed filling lines.

Discussion

MR. ANDERSON said he was always a keen supporter of glass for packaging pharmaceuticals but he thought that in this country tolerances were "far too lax." Were manufacturers facing up to their responsibilities in quality control ? MR. MOODY agreed that quality control was an important aspect of glass production "and we are doing a great deal about it." But, he pointed out, it must be appreciated that glass containers were blown into shape while in a "plastic" condition, which was not the same as moulding or pressing into shape or turning a shape on a lathe. Basically, it was a question of getting the correct design of container—one that could be produced at high speeds, and of getting the machinery that could do the work at those speeds. Manufacturers were facing up to the problem, but there was some way to go yet.

Mr. Anderson put another question on quality control, this time asking Mr. Elliott if he believed tolerances would ever be laid down for the dimensions, annealling and lacquering of aluminium collapsible tubes. The questioner said it was doubtful if any user of such tubes could have a quality control check on them as supplied by the tube maker, for there were no set tolerances and no set tests. The Collapsible Tube Manufacturers' Association, he said, refused to have any part in efforts to draw up standards.

Mr. Elliott replied that there was an Italian test for lacquering that he thought was a standard. The problem with annealing was that not all users of tubes wanted the same standards. Another difficulty was how to design a test for annealing—it was a difficult property to examine. He could see no reason why dimensions should not be standardised. He regretted the lack of standardisation, but thought that it was up to the users to approach the British Standards Institution and "get something done." Mr. Anderson said that tube manufacturers could get together to set standards for dimensions and lacquering. "We are still waiting for the C.T.M.A. to get down to drawing up standards for lacquering." A representative of John Dale Co., Ltd., said that his company had laid down standards of its own for rigid screw-top containers, yet was frequently asked to deviate from those standards. He then asked Mr. Lewis why it was that, although a good seal could be obtained with a lever-lid tin, the Ministry of Health insisted, when awarding contracts for, say, malt extract, on spot soldering of the lid in three places? Mr. Lewis: "It really comes down to the prevention of dirt under the lid, and I suppose you cannot give these Government departments anything that is not good enough for them."

Cleaning Methods and Storage Time

A question was then put to Mr. Moody on the use of washing and drying and of blowing as systems of cleaning glass bottles. Mr. Moody said that it was true there was a growing tendency to use new bottles without prewashing, and that was generally satisfactory. But the two systems should not become mixed—blowing should not be used instead of drying, as the blowing operation was meant only to dislodge particles of dirt that might have got into the bottles during storage. It was always advisable to keep the storage period for bottles as short as possible. Mr. Anderson pointed out that, in the United States, manufacturers were increasingly using blowing as the main cleaning method, and glass-bottle makers would have to co-operate by devising special means of delivery to lessen the risk of bottles becoming dirty. Mr. Moody said that that was being done in Britain. Increasingly bottles were being packed straight from the lehr without washing, or—a subsidiary method, were being washed and sterilised before being packed. By the former method there was really no need for washing.

Mr. C. T. Cresswell (Lederle Laboratories division, Cyanamid of Great Britain, Ltd.) said it had been the policy of his company for many years to use bottles packed straight from the lehr, and as a result a considerable saving had been effected on washing machinery. The bottles were used quickly after delivery and blown just before use. Supporting Mr. Anderson in his pleas for more standardisation, he added that quality control in the United States glass industry appeared much more stringent than in Britain, possibly because of differences in manufacture.

Replying to Mr. Cresswell, Mr. Moody said: "That is something our customers keep telling us about, but we have made tests on the quality of some bottles from the United States and have been amazed at what they have been getting away with! There were, of course, some fine examples also." British manufacturers were keenly aware of the problem of quality control.

Plastics and Paper

The second session of the packaging forum was concerned with the applications to pharmaceutical packaging of plastics and paper. Mr. J. Anderson presided and Dr. G. Swift led on plastics. Pointing out there was no ideal plastic material he listed the "demands" of one manufacturer as including chemical inertness, transparency, negative water absorption, impermeability to water vapour, resilience, rigidity with flexibility and cheapness.

The speaker went on to consider specific plastic materials:—

Polythene: Odourless, non-toxic, fairly clear to light, readily processed, cheap and of good water-vapour resistance but poor in perfume retention, permeable to some gases and oils, and non-sterilisable. Some of those defects were being overcome by other materials in the same class, such as high-density polythene and polypropylene, though he stressed that those materials had properties of the same order as those of polythene; or by coatings, such as saran lacquer, applied internally or externally; or by the use of nylon, which was transparent, heat-resistant and sterilisable, but permeable to water vapour and of a high water absorption; or by polystyrene, which was transparent and the cheapest thermoplastic material available, but not equal to polythene in water-vapour permeability; or by polymethyl methacrylate, which was transparent but not good in water-vapour permeability; or by polyvinyl chloride, which had the disadvantage that it had to be used with a plasticiser, the pharmaceutical industry preferring materials without additives, unless in rigid containers; or finally by polyesters (e.g., Melinex) which had the highest strength of any of the plastic materials mentioned and good permeability characteristics but the disadvantages that it was difficult to heat-seal and was at present costly.

Applications of plastics in pharmaceutical production included screw caps (now usually made with thermosetting resins: polythene was now widely in use for its better performance in humid conditions); stoppers (the speaker gave figures to show their superiority, on a wait-gain/time basis, over waxed stoppers); tubes that were light, unbreakable, capable of being overprinted or tinted or rendered opaque; bottles (their present wide use would be even wider if permeability characters were improved or if there were better coatings); laminations (as with aluminium foil, overcoming that material's tendencies to have pin-holes and to be stiff to handle); and aerosol valves.

The speaker ended by stressing the importance of laboratory tests before going into production with a plastic pack. Maximum co-operation between manufacturer and package manufacturer because both were continually facing new formulations and products.

"Interesting Stuff"

Mr. E. B. Robinson introduced the subject of the pharmaceutical applications of paper and paperboard. He gave a brief but racy outline of the development of paper containers from the "foundation of the packaging industry"—the first use of a willow or "chip" box as depicted in the Hortus Sanitatis (1486). He mentioned that, in inviting information about more recent uses of such containers, he had had thirty-nine responses to a request published in The Chemist and Druggist, and that they had "turned up some interesting stuff."

The folding box, he said, had come in the 1880's. Today, by reason of machines printing four colours simultaneously, the output was 200 times as great as from the first carton-printing machines. The cylindrical pasteboard box evolved in 1946 as a development of the pill box. There was a large field of development open in linked paper and plastic containers. The industry was one of relatively small firms that could not afford individual research, but much laboratory work was being done on the problems of the industry by the Printing and Allied Trades Research Association.

In the subsequent discussion one question was whether a non-crushable, transparent container capable of taking labels and available in, say, 1-oz. 2-oz. and 4-oz. sizes, and at a cost within the National Health Service container allowance of 1·62d., was within sight of attainment. Mr. Robinson thought that a round tube box with polythene liner might be attainable in three or four years, and Dr. Swift agreed that a combination of paper or board with plastic was the probable line of approach. A solution to the problem in plastics alone would take some time, especially in overcoming the difficulty of labelling. When Mr. J. Wright (deputy secretary, National Pharmaceutical Union) pointed out that the container allowance had to cover all N.H.S. containers, including the 24-oz. bottle, and that what was required for tablets was a container much nearer one-third of a penny, Mr. Swift thought the plastics industry would ask to be excused from offering a suggestion.

CHANGES IN PHARMACEUTICAL PRODUCTION

Mr. E. K. Samways addresses an evening meeting of the Society in London

AT a meeting at the Pharmaceutical Society's headquarters in London on April 28 at which Professor Shotton presided, Mr. E. K. Samways, B.Pharm., B.Sc., F.P.S., F.R.I.C., gave an address entitled "Pharmaceutical Production—A Changing Scene." What he said is here given in an abridged form.

Influences and Pressures

Pharmaceutical production is submitted to the external pressures that are applied to the whole industry, and their effect may be seen in the production methods employed. The rising cost of labour, reflected in the mechanisation of manufacturing and packing processes, is further reflected in simplification of the number of products manufactured, the presentation of the product, and the number of packs. The National Health Service has brought in its wake a number of specially designed dispensing packs. The competitive element in the industry has its counterpart in the productive departments and though in the industry there is less room than in some for cheapening the raw materials used, there is considerable room for economy in such items as containers and packaging materials. Traditionally, pharmaceutical production methods have had to be flexible, mainly because the outlet for any one product is rarely sufficient to justify large-scale mechanisation: even medium-scale mechanisation frequently has to suffice for two or three products. During the past twenty years there has been a determination to explore more vigorously the larger markets available overseas. At first sight finding a larger market would appear to assist in finding means for more mechanisation and larger quantity production, and that is the case up to a point. Diversity in labelling regulations and dosage forms, however, sometimes limits the extension of smooth production runs.

Then there is the need to exploit new inventions quickly. Considerable time may be required for translating a drug from the stage of first isolation to one that can be issued to the market. During that time, apart from the fear that competitors may have other similar drugs nearing readiness, an increasing investment is building up, often augmented by the cost of abortive work on related compounds. The moment the substance is ready for release the productive side of the industry must be capable of making and distributing it rapidly and in adequate quantity. In the old days it was easy to start production in a small way, increasing as the demand increased. The high cost of specialised plant today precludes that approach, requiring plant sufficient for the estimated requirements of the market to be installed at the outset and to be run at somewhere near its rated capacity. Many export markets demand service that can be rendered only if products are available for shipment from stock. Among aids in meeting overseas requirements today are improved stability of the product, maximum standardisation of formula, containers and packs, and the use of multilingual direction leaflets.

Improved cost-control techniques aided by mechanical accounting assist the production expert by providing earlier knowledge of uneconomic sections of production, and the impact of work study is now making itself generally felt. Astonishing economies can be made by careful attention to movement of goods and by arranging the factory to avoid such movement. Fatigue, too, can be greatly reduced by a careful study of hand and arm movements.

Formulation and Development

The availability of new drugs and of new adjuncts has changed pharmaceutical production. Product development requires increasingly that the product shall be stable over a wide range of conditions and for a fair length of time. The development stage is a troublesome one, for the pharmaceutical production expert can never feel satisfied that all will go well on the production scale until at least two, and preferably more, batches have been worked through to completion. The experimental manufacture of a product on that scale, and before the decision has been taken to market, is sometimes an embarrassment, particularly with a costly drug. Those difficulties are tending increasingly to bring about trial marketing, either in a few counties or in one foreign country.

Plant Utilisation

Generally speaking the pharmaceutical industry has carried out its work batchwise and in single-shift working. "I foresee an increasing amount of productive work being transferred, first to an elongated day with overlapping shifts, then to double shift and perhaps even to triple-shift working." As plant costs increase the requirement for better plant utilisation arises, and the use of plant continuously, with overlapping shifts of operators, inevitably follows. If such things as tablet machines are operated increasingly on a two- and three-shift basis, manufacturers must either accumulate results of three-shift working and have them handled by considerably larger packing lines working single shift with girl operators, or must extend mechanisation so that the packaging operations can be controlled with automatic devices and such a small labour force that it will not be uneconomic to use men for the work during night shift.

Mention of a few productive methods and the changes to be foreseen in them may be worth while.

Mixing.—Mixing of dry powders, of pastes and of liquids is one of the fundamentals of pharmaceutical production. The trough mixer is yielding place to double-cone and rotary-cube type mixers. The traditional method of batch sifting of powders in boxes shaken by overdriven mechanical shaking machines has almost given way to either the rotary sieve or the vibratory sieve, both of which can be operated on a continuous basis. There is need to follow grinding and sifting machinery with metal detectors, and the electronic metal detector is now standard equipment in many branches of the pharmaceutical industry. Trough mixers are being replaced for paste mixing by the sun-and-planet type of bowl mixer, which is now available with large power inputs and with interchangeable bowls on wheels or on dollies, and which is more readily cleanable than the traditional paste mixers.

Granulating and Drying.—Except for small runs, the traditional method of granulating by pressing through a sieve is yielding place to the high-speed granulator, which makes use of the driving force of a hammer mill to send pellets of material through the meshes of a sheet of perforated metal. "The traditional use of trays in an oven heated by steam or electricity is still with us on an extensive scale, but . . . I believe that tray methods will give way either to the high-frequency-heated tunnel dryer or more probably to the floating bed type of dryer."

Tablet Compressing and Coating.—New agents have become available in recent years to help the tablet maker, notable examples being the carbowaxes, finely divided silica, and modified starches: other additions to the armamentarium may be expected. Major changes have taken place in the design and operation of tablet compressing machines, and performances are now achievable that would have sounded fantastic a few years ago. High-speed rotary machines, for example, are available that will give an output of 300,000 tablets per hour. The layered tablet offers some advantage in keeping separate ingredients that should be segregated. The compression-coated tablet, with similar advantages, has most of the advantages of the pan-coated product while being easier and quicker to produce within specified standards. However, there now exist fully automatic coating plants in which the tablets are alternately sprayed with the warm syrup and dried with warm air, the whole operating being controlled electrically from a console.

Sterilising. — Sterilising operations, whether by wet or dry heat, have for some time been the subject of automatic record. The industry has, however, been rather slower to adopt the recorder-controller so much more popular in the chemical industry. The dry heat steriliser with automatic control of its cycle is available and becomes increasingly useful as realisation grows that an extra cycle can be obtained in the hours of darkness with no attendance whatever.

Packaging Operations

The recent trends in pharmaceutical packaging have been increasing speed and increasing standardisation. For ampouling, two-needle, two-stage machines, and more recently three-needle, three-stage machines, have become available, giving speeds rather better than 100 per minute. A bottle-filling device now available measures the delivered volume with sufficient accuracy by opening an orifice full bore for a precisely measured length of time. The time is controlled electronically, permitting the filling of litre bottles at the rate of sixteen per minute with a clean liquid cut-off and allowing time for mechanical replacement of the full with an empty bottle.

For many pharmaceuticals the balanced production line is coming into increasing use with an automatic filler followed by automatic capping unit, in-line labeller and automatic cartoner, providing a capacity of up to 180 packages per minute with the container untouched by hand from the time it enters the belt to the time it leaves in its cartoned form for outering or casing. High-speed operation has brought with it the need for much greater control of the materials handled. Bottles, for example, need controlling for weight, capacity, height, body and neck diameter and neck ovality: tubes for length and ovality: cartons for caliper of board and direction of grain: plastic and metal items for flexibility or hardness.

Plastic closures have made way for the complete plastic container and flexible bottles are becoming increasingly used. The sachet type of presentation, already familiar in the toilet field, is beginning to invade the pharmaceutical. Plastic films are much in evidence as packing materials for tablets in the strip presentation, though further work is required, both on the machines to avoid the risk of occasional perforation and on foil and film materials to deal with problems of channelling and of permeability to water vapour.

Plastic materials of low toxicity have recently been adopted for the presentation of injectables, transparent tubing of polyvinyl chloride having for some time supplanted rubber as the material of choice for intravenous injection sets. More recently high-density polythene and a special grade of non-toxic polyvinyl chloride have been developed for containers for the intravenous injection solution. Even high-density polythene containers are not entirely satisfactory when autoclaved, but careful attention to autoclaving techniques permits the use of selected polyvinyl chloride material in the production of a unit that can be sterilised by autoclaving after first having been filled, sealed and connected with the giving set. Similarly, a plastic bag containing an anticoagulant is available for the taking of human blood and for its subsequent administration or conversion to plasma.

Materials of Construction

The traditional copper vessel, internally tinned, has now almost given in to the onslaught of stainless steel, but other materials deserve mention. Teflon for gaskets, seals and bearings becomes more available every day and is less inclined than some plastics to become charged with static electricity. Pyrex glass flasks, condensers and pipelines are almost commonplace. There is a growing use of resin-bonded asbestos laminates for stopcocks, drying trays, stirrers and other items on account of its chemical resistance, physical strength and relative lightness. Bench tops that are hygienic and pleasant to work on may be cheaply prepared with plastic laminates. Colour contrast between work and background is often helpful to the operator.

There is no need to argue the necessity for analytical control. The tendency today is for a sampling officer to draw samples of packaged goods and submit them to routine analysis, but in many cases there is no substitute for a local laboratory in a manufacturing department running continual checks on the process as an aid to production. Within the field of analytical control chemical determinations are giving way to the much more rapid physical methods.

"I think we may reflect on some words of the Duke of Windsor, who said in 1927 that industry must adopt new ideas, adapt them to its needs and improve them to its particular ends. Adopt, Adapt, Improve! . . . That is what we must surely go on doing."

Discussion

A number of questions were asked on points of detail, the main matters queries related to the relative merits of arts and science graduates in the pharmaceutical industry, the speaker's answer being that while arts graduates could prove valuable, there were still important posts to be filled by pharmacists in industry; and what future there was for the dispenser if manufactured products became all "untouched by hand" and "controlled till they reach the customer." On the second question Mr. Samways had nothing to say.

UNITED STATES DRUG INDUSTRY

Kefauver subcommittee resumes hearings

THE Kefauver subcommittee investigating pricing practices in the United States drug industry (see *C. & D.*, March 12, p. 282), resumed hearings in mid-April. A number of doctors and pharmacologists were invited by the senator to give evidence and according to the *Oil Paint and Drug Reporter* they "had a number of bitter things to say."

At least two of the doctors heard by the committee called for legislation which would greatly expand the authority of the Food and Drug Administration to control the marketing of drugs and the promotional activities of the drug producers. The two doctors were A. D. Console (a former medical director of E. R. Squibb & Sons), and F. H. Meyers (University of California Medical Centre).

DR. CONSOLE said: "The pharmaceutical industry is unique in that it can make exploitation appear a noble purpose. It is the organised, carefully planned and skilful execution of this exploitation which constitutes one of the costs of drugs which must be measured not only in dollars but in terms of the inroads the industry has made into the entire structure of medicine and medical care. With the enormous resources at its command it has usurped the place of the medical educator and has effectively substituted propaganda for education."

"Most Real Progress from Europe"

DR. MEYERS challenged the claims of the drug industry for its research, saying that most of the real progress had come from European and British research workers. He said the goal of the large-scale laboratory effort in the industry was partly to exploit and market the foreign and non-industrial advances and compounds, but mostly, to "modify the original drugs just enough to get a patentable derivative."

He claimed that use of generic names in prescribing for patients should be encouraged, but that the designation of such names should be taken out of the hands of the drug trade because the tendency of the industry was to make trade names euphonious and generic names difficult to pronounce and remember.

DR. C. D. LEAKE (president, American Association for the Advancement of Science), attacked the advertising policies of some companies in the industry, but defended the industry on other points and vigorously opposed recommendations that federal controls over the marketing of drugs be tightened. He favoured extending the life of chemical and drug patents to twenty-five or thirty years because it took almost that long to find out all that was to be known about the material, but he thought the life of a trade name should end when the patent expired.

DR. J. E. BOWES (a practising physician) reported to the committee on a compilation he had made of drug advertisements and samples that had come to his office. The circulars and advertisements averaged 10½ pieces a day, he said, which meant that the 150,000 doctors all over the country were receiving daily about eight tons of mail. He estimated the cost to the industry at $12,709,305 a year. Total cost of promoting drugs to doctors through the mail and by the use of detail men he put at $210,261,215 a year.

LEGAL REPORTS

Illegal Sale

AT Doncaster borough magistrates' court recently, fines totalling £5 together with £2 12s. 6d. costs, were imposed on Doreen May Cocking, drug store proprietor, Highfield Road, Doncaster, after she had pleaded guilty to selling poison when not authorised and when poison was not properly labelled. It was alleged by the solicitor prosecuting on behalf of the Pharmaceutical Society that an official of the Society bought from the shop a bottle of cough linctus containing a small amount of morphine. Mary Levesque, an assistant, was also fined £5 with £2 12s. 6d. costs. For the defence it was stated that Mrs. Cocking's husband was a pharmacist who opened another business in Sheffield eighteen months ago and turned the Doncaster shop into a drug store, buying in bulk for his Sheffield shop and supplying the Doncaster shop with its needs. The linctus, in a special display pack, was stated to have been in the shop only two days before the Society official called.

The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer
ESTABLISHED 1859
Published weekly at
28 Essex Street, Strand, London, W.C.2
TELEGRAMS: "CHEMICUS ESTRAND, LONDON"
TELEPHONE CENTRAL 6565

Overseas Trade in Pharmaceuticals

EXPORTS of drugs, medicines and medicinal preparations from the United Kingdom during March, which were at £3·69 millions, were for the first time below the February value (£3·71 millions). The total for the first quarter of 1960 was, however, at £11·2 millions, £1 million up on the same quarter of 1959.

The largest amount of those goods exported in March to one country went to Nigeria, whose shipments, valued at £260,404, displaced Australia by a margin of about £5,000. The value of similar goods exported to Pakistan continues to increase, the total in March being £221,702 or three times that in March 1959. Canada and the United States each took about £120,000 worth. Both in March and in the first quarter of 1960 exports to Belgium and Italy were down on the comparable periods of 1959, but other Common Market countries (Western Germany, Netherlands and France), more than compensated for that loss. Pharmaceutical exports to the Irish Republic in the quarter were 12 per cent. higher at £485,000 and in line with the general pattern of trade with the Republic. March export/import values of the drugs for which statistics are available are given in the accompanying tables; they show little variation from recent months.

EXPORTS	VALUE
	£
Drugs, medicines, medicinal preparations (total)	3,699,993
Vitamins	230,038
Penicillin salts	101,993
Penicillin injections	28,287
Penicillin tablets, ointments, etc.	53.617
Antibiotics other than penicillin	497,047
Alkaloids	132.116
Aspirin	90,616
Antihistamines	65.873
Antipaludics	65.599
Barbiturates	51.510
Liver extracts	14,437
Ointments and liniments	122,590
Insulin	23,014
Hormone and gland preparations	97,343
Sulphonamides	101,325
Proprietary medicines	1,151,672
Other medicines, unclassified	813,426
Glycerin	44,773
Acetone	11,786
Citric acid	45,758
Salicylates	12,262
Perfumery and toilet preparations	
Lipstick, face powder, etc.	293,553
Dentifrices	161,895
Toilet soaps	272.066
Synthetic detergents	547.439
IMPORTS	£
Vitamins	38,642
Antibiotics	125,618
Alkaloids	90,020
Proprietary medicines	56,424
Unclassified medicines	100,607
Borax	100.175
Iodine	38,975
Menthol	48,553
Essential oils	
Bergamot	40.373
Citronella	45,054
Clove	21,798
Geranium	52,214
Lavender	18,045
Lemon	54.969
Orange	25,154
Peppermint	91,011
Unclassified	243.109

For United Kingdom trade as a whole the level in March was seasonally high but, after adjustment to take account of variation in length of the working month and normal seasonal rise, imports and exports were both less than in January and February. Seasonally adjusted, the exports of United Kingdom products in the first quarter of 1960 were 4 per cent. more than in the final quarter of 1959, and 10 per cent. above the average 1959 level. On the same basis imports in the first quarter were 3½ per cent. more than in the previous quarter and 12 per cent. more than in 1959 as a whole. Re-exports showed little change at £11 millions (£12 millions in the previous quarter and £11 millions average in 1959). Between the third and fourth quarters of 1959 imports had increased by 8 per cent. and United Kingdom exports by 5½ per cent. The latest figures might therefore suggest some easing in the rate of increase, though the Board of Trade states that " it is too early to state with any confidence that the underlying trend of imports is beginning to flatten out."

Onward from Galen

A CURRENT CAUSERIE

YET another method of saturating the doctor in the United States with information (and perhaps attracting some of the money spent on advertising by pharmaceutical manufacturers) is a projected daily medical newspaper under the name of the *Medical Tribune*, states the March issue of *Drug and Cosmetic Industry*. Beginning as a 32-p. issue, the newspaper is due to appear each Monday. Later in the year a second weekday edition is being added, and by 1961 the paper should appear daily. When that day arrives the American doctor will be able to claim that he is truly well informed—if he finds the time to read the *Tribune* each day. If he doesn't, the obvious way to bring him into line would be to bring him before a *Tribunal*.

★

REFERENCES to the national drug bill might conceivably be met by a quote from a new book, " Admiral Lord Anson " (Cassell, 35s.). Just two centuries back the premier admiral of Britain had engineered the rout of French naval power and the end of Spanish imperialism. But he was sharply attacked by gout. The book comments that he paid £5,000 for a prescription to cure it. Details are:

> " for the Gout of Rheumatic Gout
> 1 drachm of Guinguineum
> 2 drachm of Rhubarb
> 1 oz. of Cream of Tartar
> 2 oz. of Flower of Sulphur
> 1 pound of Clarified Honey
> one Nutmeg or some Ginger grated into the above and the whole made into an Electuary.
> take two Spoonfulls Night and morning fasting for 10 or 12 times if the Dose operates too strongly on the Bowells the

> Quantity must be lessened the Patient may drink any warm Liquor but should avoid Cold Drink.

No " results " for the £5,000 worth are given, but elsewhere the author, Captain Pack, mentions the sole reaction of Anson's father-in-law, Lord Hardwicke, Chancellor at the time, to the trial and execution of Admiral Byng: he wrote to Anson a letter avoiding the tragedy of Byng, but dilating on " an accident " he had suffered. Hardwicke took " Rhubarb, which has operated so much so late that my lady will not give me leave to stir out this cold night." The juxtaposition of those medical data suggest a new trend—perhaps—in important biographies.

Edinburgh's " Shorter Hours " Struggle, 1839

Sunday closing made conditional on " an assistant within "

LAURENCE DOPSON

HITHERTO unpublished manuscripts in the library of the Royal College of Physicians of Edinburgh on an effort in 1839 to reduce the hours of opening of chemists' shops reveal that, at that period, many druggists' assistants were studying medicine — " working their way through College," in a manner which I believe it has not previously been realised was the case in any British university. How they managed to do so with the hours they had in shop is a mystery that will never be solved. The incident also reveals that the Royal College of Physicians and the Royal College of Surgeons of Edinburgh were acting in close collaboration with each other, and—a further largely unknown fact—that there was an organised meeting of medical practitioners of Edinburgh and Leith who were not members of either College.

A Petition from the Assistants

No. 236 of the Miscellaneous Papers in the library of the physicians' college includes a manuscript petition to the College from the Druggists' Assistants and Apprentices in Edinburgh and Leith and a printed document of the Royal College of Surgeons entitled " Proceedings and Documents relative to the Closing of the Apothecaries' and Druggists' Shops During the hours of Divine Worship on Sunday." Reference has also been made to the minutes of the Royal College of Physicians to fill in the details of what is a little known but not unimportant incident in pharmaceutical history which has great social interest. The petition reads:

> Unto the President and Fellows of the Royal
> College of Physicians.
> The Memorial of the Druggists' Assistants and
> Apprentices in Edinburgh and Leith,
>
> Humbly Showeth
>
> 1st. That at a meeting of your Memorialists, lately held, measures were agreed upon for attempting to obtain an alteration of their present very lengthened hours of attendance to business.
>
> 2nd. That, as many of your Memorialists are engaged in studying Medicine, such an alteration would be of the greatest consequence to them, since by the present arrangements they are unable to pay that attention to their studies which so important a profession requires.
>
> 3rd. They propose that the hour of shutting their shops should in future be nine o'clock evening, and that they should be closed during Divine Service in the forenoon and afternoon of the Sabbath day.
>
> 4th That conceiving how much the countenance of the Medical Profession will contribute to the successful issue of their endeavours, they have taken the liberty to present this Memorial, earnestly trusting that it will receive your early and favourable consideration.
>
> Signed in name and by appointment of the General
> Committee of Druggists' Assistants.
> Willm Finlayson Secy.

In the subsequent development of the controversy reference to the " early " closing in the evenings seems to have been dropped. The emphasis was upon the closing on Sundays during divine service. " A Regulation lately made by some of the Apothecaries to shut their shops during the time of Divine Service having been brought under the consideration " of the Extraordinary Meeting of the Royal College of Physicians of Edinburgh on March 13, it was moved by Dr. John Macwhirter, a past-president, and seconded by Dr. Lewins " That in the opinion of the College at least one qualified person should be in attendance at the shops of the Apothecaries to prepare and dispense Medicines, at all hours, Sundays not excepted." Deliberation on the motion was, however, postponed. It was resumed at the adjourned extraordinary meeting on March 16, 1839.

On that occasion the President, Dr. (later Sir Robert) Christison, moved from the chair an amendment, " The College beg to express their desire to contribute what lies in their power towards enabling the Assistants and others in the employment of Druggists, to enjoy that relaxation in the evening, and that exemption from Business on Sunday, which are enjoyed in other Trades; but at the same time the College may be permitted to express their fears that the proposed arrangement would be attended with great inconvenience and even injury to the Public, as well as to the Medical Profession, if it were carried so far as to render every Druggist's shop in the City, and more especially those of extensive resort, inaccessible after 9 o'clock p.m. daily, and during Church Service on Sundays." Dr. Wood moved a further amendment, to appoint a committee to go into the subject, but that was lost and Dr. Christison's motion was carried.

On the same day the Royal College of Surgeons of Edinburgh was, at an ordinary meeting, considering its position in the matter. " After considerable discussion, it appeared to be the general sense of the College that, for the reasons stated by several members, there was a paramount necessity for having access on Sundays, as well as other days, to the remedial means afforded in the Laboratories of the Apothecaries."

Adam Hunter, the president, wrote a letter to the Chairman of the Committee of Apothecaries and Druggists in which he stated: " . . . While the College duly appreciated the motives which led to the proposed arrangements, and are anxious, as far as they can, collectively and individually, to give their influence in support of the measure, yet they feel that the present plan cannot well be carried into execution with due attention to the exigencies and safety of the community; and the College therefore desire me to express their hope that such modifications of the measures may be adopted as may obviate the difficulties which have either actually been felt or may be apprehended from the arrangement continuing on its present footing."

H. C. Baildon (chairman of the committee of apothecaries and druggists of Edinburgh and Leith) replied suggesting a conference with the College or a committee of the college. His letter was received on March 21, and on March 23 Dr. Hunter replied that the president's Council had that day decided there was no ground for calling a meeting of the College for the purpose of granting a committee, the College having already given a deliberate negative to such a proposal. Concluded Mr. Hunter: " While I might assure you, at the same time, of the cordial reception of any reasonable proposition . . . for promoting the sancity of the Lord's Day, and which shall likewise secure to the Medical Profession and to the community at large, the facility of obtaining such *secondary agents* as are requisite for the mitigation of acute suffering, or cure of unforeseen attacks of severe disease, occurring during Divine service, the relief or cure of which can only be hoped for, under God's blessing, in prompt administration of the appropriate remedies."

A Matter of High Expediency

On March 30 the president tabled a series of motions which, on the proposition of Mr. William Wood, seconded by Dr. Maclagan, were adopted unanimously. They reaffirmed the College's position—that it would consider any plan "to remove the evils of the present system of attendance in shops on Sundays" which was not inconsistent with the safety and welfare of the public, and instructing the president to continue his negotiations. The last resolution read: "That it seems highly expedient that the practice should be abandoned of the Druggists trading on Sunday in articles not strictly medicinal." That is the end of the printed document.

Meanwhile the president of the College of Physicians "had met repeatedly with various parties interested in the proposed changes as to the closing of the druggists' shops on Sundays." The college minute of April 3, 1839, shows that no plan had yet been definitely fixed upon "as the Druggists wished to consult more fully the sentiments of the Medical Profession on the subject." The president reported the resolutions of the surgeons, and the physicians passed its own resolution, which again was sympathetic in principle. It was decided that a three-man committee, consisting of Drs. Abercromby and Macwhirter, with the president, should "bring the matter to as speedy an adjustment as possible."

The end of the story appears from the minutes of the quarterly meeting of the Royal College of Physicians on May 7, 1839. "The president reported upon the closing of the druggists' shops on Sunday, that the druggists had adopted Resolutions proposed to them by a conjunct committee of the College of Physicians, College of Surgeons and Practitioners in Edinburgh and Leith not members of either College, to the effect that their shops should be closed throughout the whole of the Sabbath and that an Assistant should be constantly within, whose services might be obtained, when necessary, by means of a bell at the shop door. That the conjunct Committee had further expressed their opinion that in the instance of very many druggists it might be found sufficient for them to have their shops thus accessible at certain hours only, but that this and other arrangements for the further relief of their assistants should be better left to the future experience of each."

MEDICAL ABSTRACTS

CAVODIL TREATMENT OF ANGINA PECTORIS

Earlier clinical investigations of iproniazid in the treatment of angina pectoris have shown conflicting results. The pharmacological activity of that compound derives its ability to inhibit monoamine oxidase. Mackinnon, Anderson and Howitt (*Brit. med. J.*, 1960. **1.** 243) report upon Cavodil (betaphenylisopropylhydrazine), a more potent monoamine oxidase inhibitor, in the treatment of angina pectoris. Twenty-seven patients completed the trial, which was according to the double-blind technique using lactose as an inert control. The test drug has a prolonged effect, a single dose having an effect lasting 7–10 days. As a result, test and control tablets were given alternately for one month followed by a null period of fourteen days before recommencing treatment. Dosage was based upon a 6 mgm. tablet twice daily. The authors allowed for the fact that angina, being a subjective sensation, tends to give rise to reports of improvement from any treatment. Improvement with Cavodil alone occurred in 41 per cent. of subjects but 4 per cent. reported improvement from the control. Since the improvement from both tablets was 44 per cent. Cavodil was taken as providing improvement in 85 per cent. of cases against the 48 per cent. of the control tablets.

DIURETICS UNDER TEST

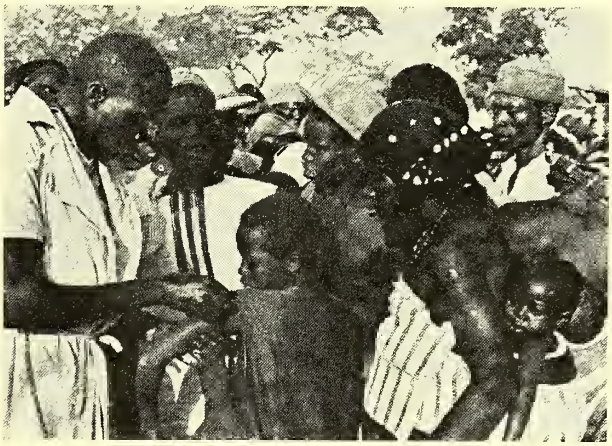
With the co-operation of ten male medical students acting as experimental subjects, Young, Forrester and Morgan (*Lancet*, 1959. **II.** 765) compared the diuretic actions of the derivative chlorothiazide with two newer and closely similar compounds hydrochlorthiazide and hydroflumethiazide. They found that 150 mgm. daily of the newer compounds produced the same diuretic effect and pattern of electrolyte excretion as 2,000 mgm. of chlorothiazide. For the first twelve hours the sodium and chloride losses produced by all three drugs were essentially similar, but whereas the effect of the chlorothiazide then ceased, the newer compounds continued to act for a further twelve hours, though at a lower level. Hydrochlorthiazide and hydroflumethiazide, moreover, had a less tendency to cause potassium and bicarbonate loss. The longer action and smaller effective dose of the newer compounds was considered to be a result of their being more completely absorbed from the intestine and less rapidly eliminated than chlorothiazide. The use of hydroflumethiazide in twenty-one œdematous patients is also described by Jones and J. Verrier Jones (*Brit. med. J.*, 1959. **II.** 928). Seventeen of the subjects responded well to doses of 200 and 400 mgm. daily, and the general pattern of the diuretic action was the same as that found by Young and his co-workers. In nine patients in whom urinary electrolytes were measured daily the maximum sodium and chloride excretion was found to coincide with the maximum water diuresis. A single dose of 400 mgm. given to five subjects produced a sodium excretion 2·1 times greater than on the control day, and 4·1 times greater at its maximum. Potassium excretion was less during the last twelve hours of the test day than on the control day. Using five subjects, Jones and Jones found no increase at all in the urinary *p*H or bicarbonate excretion. They suggest that the absence of inhibition of carbonic-anhydrase activity might be expected to limit the degree of potassium depletion. No side effects were produced during the treatment and no significant blood changes were observed from weekly blood counts.

NEW FILMS

Unseen Enemies

The Petroleum Films Bureau, 29 New Bond Street, London, W.1 (in Scotland, *Scottish Films Office*, 16 Woodside Terrace, Glasgow, C.3. Running time, 31½ minutes. 16 mm. or 35 mm. Colour. Sound.

Produced by the Shell Film Unit, the film illustrates the pitiful effects of many tropical and sub-tropical diseases and how they spread. Its aim is to draw attention to the need for social planning to support medical progress in the prevention of communicable disease. Though Shell produce large quantities of insecticides and other chemicals used in the campaign against disease-carrying insects (no one unaware of that fact would find it out from the film), it is primarily intended that the film reflects the company's interest in ways and means of raising living standards in an expanding world economy from which all may benefit. The cameramen shooting the film travelled nearly 50,000 miles to take the sequences. Seven language versions are available with another twelve in preparation.



GUIDE TO NEW MEDICAMENTS

Information about proprietary products supplied principally on prescription. Reprints on perforated gummed paper for affixing to index cards are obtainable from the Editor. Notes on the products are given on p. 559.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

CORYZIN

MANUFACTURER: Gedeon Richter (Great Britain), Ltd., 14 Weedington Road, London, N.W.5.

DESCRIPTION: Sugar-coated tablets each containing: gr. ¾ of quinine dihydrochloride and 150 mgm. of ascorbic acid.

INDICATIONS: Prophylaxis and treatment of colds.

DOSAGE: *Adults:* Prophylactically, one tablet two or three times daily. Therapeutically, two tablets three times a day for 3–4 days. *Children:* (therapeutically only) one tablet three times a day for three days.

HOW SUPPLIED: In containers of fifty, 250, 500 and 1,000.

FIRST ISSUED: March 1960.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

STIMPLETE elixir

MANUFACTURER: John Wyeth & Brother, Ltd., Clifton House, Euston Road, London, N.W.1.

DESCRIPTION: A cherry-coloured liquid containing in each 4 mils (teaspoonful): Phenobarbitone, 25 mgm.; dexamphetamine sulphate, 5 mgm.; aneurine hydrochloride, 2·5 mgm.; riboflavine, 1·0 mgm.; pyridoxine hydrochloride, 0·17 mgm.; nicotinamide, 10 mgm.; alcohol, 11 per cent. v/v.

INDICATIONS: To control moods; treatment of mild depressive states; combat physical discomfort of dieting patients.

DOSAGE: One teaspoonful two or three times daily after meals (for stimulation) or before meals (for dieting and obese patients) subject to individual requirements.

HOW SUPPLIED: In bottles of 4 and 40 fl. oz.

FIRST ISSUED: March 1960. SUPPLY RESTRICTIONS: P.I, S.1, S.4A.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

MELLERIL

MANUFACTURER: Sandoz Products, Ltd., 23 Great Castle Street, London, W.1.

DESCRIPTION: White sugar-coated tablets each containing 10 mgm., 25 mgm., 50 mgm. or 100 mgm. of thioridazine hydrochloride.

INDICATIONS: Mental and emotional disturbance characterised by anxiety, tension and agitation.

DOSAGES: *Adults:* Acute schizophrenia, manic psychoses, 150-600 mgm. daily; psychomotor agitation in severe psychoneuroses, 75–200 mgm.; anxiety, tension, apprehension, etc., 30–100 mgm. *Children:* Behaviour disorders (under 5 years) 0·5 mgm./lb. body weight; over 5 years, ¼–½ adult dosage.

HOW SUPPLIED: In containers of fifty and 250 tablets.

FIRST ISSUED: April 1960.

NOTES: Contraindicated in severely depressed or comatose states.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

BEMASULPH

MANUFACTURER: B.M. Laboratories, Ltd., 80 Buckingham Gate, London, S.W.1.

DESCRIPTION: Tablets each containing 200 mgm. of chloroquine sulphate (equivalent to 150 mgm. of chloroquine base).

INDICATIONS: Malaria; amoebic hepatitis; lupus erythematosus; and rheumatoid conditions.

DOSAGES: For malaria prophylaxis, two tablets weekly. For treatment: *Adults* and *children* over twelve years: four tablets immediately, then two tablets in six hours, followed by two tablets once daily for two days. *Children* under one year: One-eighth adult dose; 1–4 years: quarter adult dose; 4–8: half adult dose; 8–12: three-quarters adult dose.

For amoebic hepatitis: one tablet four times daily for two days, then one tablet twice daily for 2–3 weeks. Lupus erythematosus: one tablet twice daily for 1–2 weeks then 1 tablet daily for maintenance. Rheumatoid conditions: Usually 1 tablet daily.

HOW SUPPLIED: In containers of twenty-five, 100, 500 and 1,000 tablets. FIRST ISSUED: March 1960.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

NARDIL

MANUFACTURER: Wm. R. Warner & Co., Ltd., Eastleigh, Hants.

DESCRIPTION: Sugar-coated tablets each containing 15 mgm. of beta-phenylethylhydrazine dihydrogen sulphate (phenelzine).

INDICATIONS: For the treatment of depressive states: Endogenous depression, involutional depression; atypical depression, e.g. phobic anxiety states, with secondary depression, anxiety hysteria; reactive depression.

DOSAGE: One tablet three times a day.

HOW SUPPLIED: In bottles of 100 and 500.

REFERENCES: *Dis. nerv. Syst.*, 1959, **20**, 197; *Amer. J. Psychiat.*, 1959, **116**, 71; *Ann. N.Y. Acad. Sci.*, 1959, **80**, 687.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

ECOMYTRIN

MANUFACTURER: Wm. R. Warner & Co., Ltd., Eastleigh, Hants.

DESCRIPTION: An ointment containing 0·5 per cent. of amphomycin and 0·33 per cent. of neomycin B base in a vanishing-cream base.

INDICATIONS: Primary infective skin disorders: impetigo, sycosis, folliculitis. Secondarily infected skin disorders: eczema with secondary infection, infected ulcers, infected wounds. Chronic staphylococcal nasal carriers.

DOSAGE: A thin layer should be applied directly to the skin three or four times daily.

HOW SUPPLIED: In tube of 15 gm.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

DI-ADEMIL-K

MANUFACTURER: E. R. Squibb & Sons, Ltd., Edwards Lane, Speke, Liverpool, 24.

DESCRIPTION: Light yellow, capsule-shaped, coated tablets, each containing: 25 mgm. of hydroflumethiazide; and 625 mgm. of potassium chloride.

INDICATIONS: All clinically common œdematous states especially when supplemental potassium is desirable, i.e., in long-term therapy, in patients on digitalis and patients with hepatic cirrhosis. Also used in hypertension and the treatment of obesity.

DOSAGES: Dosage is individual and adjusted according to condition. *Œdema:* Initially, 4 tablets in divided doses. Maintenance, 1-4 tablets daily in divided doses; some patients respond to 1-2 tablets at breakfast on two mornings in the week. *Hypertension:* 2-4 tablets daily in divided doses until a response permits a maintenance dose of 1-2 tablets once or twice daily.

HOW SUPPLIED: In bottles of twenty-five, 100 and 500 tablets.

FIRST ISSUED: April 1960.

REFERENCES: *Practitioner*, 1960, **184**, 248.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, May 7, 1960

HYPERTENSIN-CIBA

MANUFACTURER: CIBA Laboratories, Ltd., Horsham, Sussex.

DESCRIPTION: Ampoules each containing 500 microgm. of lyophilised val$_5$-hypertensin 11-asp-β-amide, which for administration is dissolved in 2 mils of sterile solvent and then added to isotonic saline or 5 per cent. glucose to produce a concentration of 1 microgm. per mil.

INDICATIONS: Shock and collapse (traumatic, post-operative, toxic, infective and after myocardial infarction in certain cases).

DOSAGE: Infusion is commenced with 1 microgm./mil; carefully increased until a pressor effect is observed. Rarely as much as 10 microgm./mil. may be needed. For such cases a higher concentration of hypertensin should be prepared, to avoid the necessity for transfusing large volumes of diluent. The blood pressure should be measured frequently and the rate of infusion adjusted.

HOW SUPPLIED: In box of six.

FIRST ISSUED: April 1960.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

London, May 4: The markets showed little change during the week. In Crude Drugs inquiry was chiefly restricted to commodities in short supply amongst which is now Copaiba balsam.

Ginger prices were somewhat erratic; African on the spot moved up to 150s. per cwt. (up 10s.) and Cochin new crop for shipment jumped 35s. to 185s., on the other hand Jamaican eased 7s. 6d. to 217s. 6d. for No. 3 grade. Indian Henna was available on the spot at 90s. against 95s. per cwt. recently. Whilst there was Russian Liquorice on offer Persian was still quoted at 46s. 6d. per cwt. All grades of West Indian Nutmegs were lower, the 80's being offered at 12s. per lb. Also lower among Spices were Pepper and Turmeric.

The lower rates now operating for Formosan Citronella caused a threepence-per-lb. fall in the Ceylon oil at source. Elsewhere among Essential Oils Penang Patchouli was sixpence per lb. lower for shipment.

Pharmaceutical Chemicals

Acetanilide. — Crystals. One-cwt. lots, 2s. 10d. per lb.; 5-cwt., 2s. 9d.

Aneurine hydrochloride. — 1-kilo, £11 15s.; 10-kilos, £11 7s. 6d. per kilo.

Ascorbic acid.—One-kilo, £3 12s.; 10 kilos, £3 10s. per kilo. Sodium ascorbate is offered at the same prices.

Borax.—B.P. grade, 1 ton and upwards; Granular, £56; crystals, £59 10s.; powder, £60 10s.; extra fine powder, £61 10s. per ton, all in hessian sacks. Commercial from £46 to £52 10s. per ton, as to type and packing. Dehydrated borax is £70 per ton in paper-lined hessian bags or £69 in paper bags; carriage paid in Great Britain. Surcharges for smaller quantities: Less than 1 ton but not less than 5 cwt., 1s. per cwt.; 3 cwt., 2s.; 1 cwt., 3s.

Boric acid.—B.P. grade in 1 ton and upwards (per ton): Granular, £91; crystals, £99; powder, £96 10s.; extra-fine powder, £98 10s. per ton in lined hessian bags, carriage paid in Great Britain. Less £1 per ton if supplied in paper bags. Technical from £77 to £86 10s. per ton according to type and packing.

Calciferol.—B.P., 3s. 3d. per gm. for 1-kilo lots.

Calcium pantothenate.—£8 per kilo.

Cyanocobalamin.—25-gm. lots, £39 per gm., and 1 gm., £40.

Digoxin. — 100-gm. lots, 78s. per gm.

Ether.—Per lb. in winchesters: technical B.S.S., and solvent, 5-cwt. 2s. 7d.; (4s. 1d. per litre). In drums the price is 2s. 2d. per lb. Anæsthetic, B.P., 5-cwt., 3s. 10d.; 10-cwt., 3s. 9d.

Folic acid.—B.P. and U.S.P., 1s. per gm. 1-kilo lots; smaller lots, up to 1s. 6d. per gm.

Glycerin.—Pharmaceutically pure (s.g. 1·2627):

Annual purchases or spot lots of	Under 1 cwt.		1 cwt. and under 5-cwt.		5 cwt. and under 1 ton		1 ton and under 5 tons		5 tons and under 25 tons	
Per Cwt.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
Tins										
14-lb.	281	0	276	6	272	6	268	0	265	6
28-lb.	279	0	274	6	270	6	266	0	263	6
56-lb.	275	0	270	6	266	6	262	0	259	6
Drums										
1-cwt.	—		254	6	250	6	246	0	244	6
2½-cwt.	—		251	6	248	0	243	6	242	0
5-cwt.	—		—		247	6	243	0	241	6
10-cwt.	—		—		246	6	242	6	241	0

For 25 tons and upwards the price is from 265s. 6d. to 240s. as to containers. Bulk deliveries in tank wagons from 236s. to 237s. 6d. Technical grade glycerin, s.g. 1·2627, is 5s. per cwt. less than the above.

Guaiacols. — liquid B.P.C., 16s. per lb. for 1-cwt. lots; crystals, 15s. 9d.; carbonate, 18s.

Hexamine.—B.P., 1s. 11½d. per lb. for 1-ton lots, delivered in 1-cwt. kegs. Technical is threepence per lb. less.

Hyoscine hydrobromide.—Per oz., 102s.

Ichthammol.—B.P. from 2s. to 2s. 6d. per lb. in 1-cwt. lots as to origin and container.

Iron salts.—gluconate, B.P.C., 6s. 3d. per lb. in 1-cwt. lots; sulphate, B.P., crystals, 9½d. per lb. in 28-lb. lots; 1-cwt., 57s. 6d. per cwt., 5-cwt., 52s. 6d. per cwt.; sulphate exsiccated, 1s. 5d. per lb. for 28-lb., 1-cwt. 123s.; 5-cwt., 113s. per cwt., 1-cwt. fibre kegs free. Other packages extra. phosphate, B.P.C., 28-lb., 3s. 6d. per lb.; 1-cwt., 3s. 3d. phosphate, saccharated, B.P.C., 28-lb. lots are 3s. 9d. per lb.; 1-cwt., 3s. 6d. oxide red precipitated, B.P.C., 1949, 1-cwt. 2s. 1d. per lb.; carbonate, saccharated, B.P.C., 1949, 28-lb., 3s. 3d.; 1-cwt., 3s. ammonium citrate, scales, 3s. 6d. per lb. (5-cwt. lots). ammonium sulphate, 1-cwt., 1s. 10d. per lb. quinine citrate, 2s. 1d. per oz. in 100-oz. tin.

Mandelic acid.—One-cwt. lots, 12s. 6d. per lb. Calcium salt also 12s. 6d. Sodium mandelate, 13s. and ammonium mandelate 50 per cent. solution, 7s. 6d.

Menaphthone. — B.P., 170s. per kilo; acetomenaphthone, B.P., 170s.; water-soluble (menadione sodium bisulphite, U.S.P.), 200s. per kilo.

Mercury derivatives.—Quotations (per kilo) for less than 50-kilo lots:—ammoniated, B.P., lump or powder, 57s. 9d.; perchloride, B.P., powder, 49s. 6d. and lump, 50s. 9d.; subchloride (calomel), B.P., 56s. 9d.; oxides, yellow, B.P., 60s.; red B.P.C., 1949, 61s. 3d.

Nicotinamide. — (Per kilo). One-kilo, 61s.; 10 kilos, 59s.; 50 kilos, 57s.

Nicotinic acid. — One-kilo, 39s.; 50-kilos, 36s. per kilo.

Nikethamide.—Per kilo, 100s.

Paraffins. — Prices to wholesale distributors are:— *Liquid:* heavy, B.P., £102 2s. 6d. per ton; light B.P., £84; *Technical White oils,* £75 10s. for the light and £89 for the medium. All in 40–50 gall. returnable loaned drums, delivered U.K. *Soft:* White, medium consistency is £110 15s. per ton and soft consistency £107 7s. 6d. Yellow, £88 10s., all B.P., in non-returnable drums delivered.

Riboflavine. — One kilo, £13 17s. 6d.; 10-kilos, £13 10s. per kilo.

Saccharin.—B.P.C. powder. One lb. and over, 99s. 10d. per lb.; Sodium salt, 80s. 10d. per lb. Prices include duty and carriage.

Salicylamide.—One-cwt., 6s. 9d. per lb.

Sulphur.—(Per ton in 1-ton lots), B.P. precipitate, £112 10s.; sublimed, B.P. £47 10s.; powder, 100 mesh, £25 10s.

Terebinth.—B.P., 2s. 3d. per lb.

Theophylline.—50-kilo lots: Alkaloid anhydrous, 34s. 6d. per kilo and B.P. 33s. 3d.; aminophylline, 33s. per kilo.

Vitamin A.—Synthetic. Supplied in concentrate 1 million international units per gm. as acetate or palmitate the price is 9½d. per million i.u.

Vitamin D_2.—In oil, 2 million units per gm. the price is 2d. per million international units. Crystalline: see under calciferol.

Vitamin E (synthetic or natural).—Tocopheryl acetate, B.P.C., 25 gm. to 100 gm., 11d. per gm.; 100 gm. to 1 kilo, 9d. per gm.; 1 kilo and under 10 kilos, £31 5s. per kilo; 10 kilos, £30 10s. per kilo. Equivalent prices for unesterified are: 1s. and 10d. per gm. and £37 and £35 10s. per kilo.

Industrial Chemicals, Solvents

Acetaldehyde. — The 100 per cent. is £122 per ton.

Acetates.—Per ton, spot 1-ton lots: Amyl (technical), £254, and B.S.S., £256. Butyl, £169; Ethyl, £141; Isopropyl, £136.

Acetic anhydride. — 10-ton lots, £126 per ton, delivered U.K. in returnable drugs; 1-ton, £128.

Acetone.—One-ton lots spot. £90 per ton in drums.

Benzole. — Thiophene-free, 9s. 3½d. per gall. for one 50-gall. barrel; pure, 6s, 3½d. per gall.

N-Butyl alcohol. — 1–5-ton lots, £159 per ton and one-ton lots, £163 per ton. Secondary, £130.

Carbon tetrachloride. — In 40-gall. drums, 1 ton and under 2 tons, £83 15s.; 4 tons and upwards, £82 5s.

Isopropyl alcohol. — Technical grade (99 per cent.) 5s. 0½d. per gall. for 10,000-gall. lots; anhydrous in drum lots is £108 per ton.

Methyl ethyl ketone. — One-ton lots, £138 10s. per ton.

Naphthalene. — Home contract prices (per ton for 4-ton lots at one time):—crude, crystallising point 64–71·9° C., £22 5s. to £23; whizzed, c.p. 72–77·5° C., £27 5s. to £35 15s. according to the crystallising point, ex works: phthalic grade, minimum c.p. 77·5° C., £42 10s. ex maker's works; crystals from £62 10s. to £65, delivered; ball and flake, £71 to £73 10s. delivered.

Phthalates.—Prices (per ton) one-ton lots: Dibutyl, £206; Di-isobutyl, £199; Di-ethyl, £190 10s.; Di-methyl, £182.

Stearates. — Spot prices for minimum 1-ton lots:—Aluminium (all grades), 253s. 6d. per cwt., Calcium (precipitated), 243s. 6d.; Lead (30 per cent.), 223s. 6d.; Magnesium (standard), 272s. and (superfine), 302s.; Zinc, 226s. to 286s. as to grade.

LONDON EXCHANGE RATES

At the opening on Tuesday

Amsterdam..	Florins to £	10·58⅞–10·59⅛
Bombay ..	Shillings to rupee	1/5$\frac{15}{16}$–1/6$\frac{1}{16}$
Brussels ..	Francs to £	140·02½–140·07½
Copenhagen.	Kronor to £	19·36⅝–19·36⅞
Frankfurt ..	D Marks to £	11·71¼–11·71½
Hong Kong .	Shillings to $	1/2$\frac{15}{16}$–1/3$\frac{1}{32}$
Karachi ..	Shillings to rupee	1/5$\frac{15}{16}$–1/6$\frac{1}{16}$
Lisbon ..	Escudos to £	80·20–80·30
Malaya	Shillings to $	2/4–2/4⅛
Montreal ..	Dollars to £	2·71¼–2·71⅜
*New York..	Dollars to £	2·78–2.82
Oslo	Kronor to £	20·02¼–20·02½
Paris	Francs to £	13·76⅞–13·77⅛
Stockholm ..	Kronor to £	14·50¼–14·50½
Zurich ...	Francs to £	12·18–12·18¼

*Bank of England official limits. Bank rate: 5 per cent. from January 21.

Crude Drugs

Aconite. — Spot: Spanish *napellus,* 2s. 6d. per lb.

Agar. — Kobe No. 1, 13s. 9d. per lb., in bond; shipment, 13s. 6d., c.i.f.

Aloes. — Cape primes, spot, 200s. per cwt. quoted; shipment, 192s. 6d., c.i.f. Curaçao, 500s., spot.

Balsams.—Per lb.:—Canada: Spot, 22s. Copaiba: Para scarce on the spot, small lots at 7s. 9d., duty paid. Peru: Spot, 9s. 6d. in bond. Tolu (genuine as imported): spot cleared, shipment not offering. Small parcel afloat quoted 24s., landed; B.P., 14s. 3d.

Belladonna.—Leaves (t.a. 0·6 per cent.), 2s. 9d. per lb. Dutch for shipment, 2s., c.i.f. Root cleared on the spot.

Benzoin.—Sumatra block, spot £22 to £30 as to quality.

Buchu. — Spot rounds, 3s. 6d. per lb., shipment, 3s. 1d., c.i.f.

Calabar beans.—Spot, 1s. 8d. per lb.

Calamus.—Root, 1s. 2d. per lb., c.i.f.

Calumba.—Root, 100s. per cwt., spot: 87s. 6d., c.i.f.

Camphor.—B.P. powder, 3s. 7½d. per lb. in bond.

Capsicums. — East African nominally 190s. per cwt. Chinese, 155s., duty paid.

Cardamoms. — Aleppy greens, spot, 15s. 3d. per lb.; prompt shipment, 14s. 6d., c.i.f. Seeds, shipment, 21s. 6d., c.i.f.

Cascara.—Spot, 295s. per cwt.; prompt shipment, 275s., c.i.f.; 1960 peel, June–July, 237s. 6d., c.i.f.

Cassia.—*Fistula,* 115s. per cwt., spot; *lignea,* 400s., duty paid.

Cherry bark. — Thin natural, 1s. 6½d. per lb.; rossed, 1s. 11d.

Cinnamon quills.—Shipment (c.i.f., per lb.) 4 O's, 6s. 0¼d.; 3 O's, 5s. 8½d.; O, 5s. 3d.; quillings, 3s. 4½d.; featherings, 1s. 10¾d.

Cloves.—Zanzibar spot, 2s. 9d. per lb.; shipment, 2s. 5¼d., c.i.f.

Cochineal.—Black-brilliant, 12s. 9d., per lb., spot; Peruvian silver-grey, 4s. 6d.

Cocillana.—Bark, 2s. per lb., spot.

Colocynth pulp.—Spot, 2s. 6d. per lb.

Ginger.—African, 150s. per cwt. spot; shipment, 145s., c.i.f. Jamaican No. 3, spot, 217s. 6d., shipment, 197s. 6d., c.i.f. Cochin, shipment, new crop, 185s., c.i.f.; spot, 185s.

Gum acacia.—Kordofan cleaned sorts, 175s. per cwt., spot; May–June shipment, 170s., c.i.f.

Henna. — Indian, spot, 90s. per cwt.

Karaya. — No. 1 gum, spot 265s. to 285s. per cwt., No. 2, 225s.

Kola nuts. — Jamaican for shipment, 7d. per lb., c.i.f. African, 5½d. spot and 4d., c.i.f.

Lanolin. — Anhydrous, B.P. is from 170s. to 175s. per cwt. in 1-ton lots and hydrous, B.P., 150s., free drums, delivered.

Lemon peel. — Spot, 2s. 6d. per lb.; shipment 230s., c.i.f.

Linseed. — Whole, 85s. per cwt.; crushed, 110s.

Liquorice. — Natural root: Persian on the spot, 46s. 6d. per cwt. Block juice: Anatolian from 190s. per cwt.; Italian stick from 310s. to 470s. per cwt.

Lobelia herb. — American, spot, 4s. 9d. per lb.

Mace.—Whole pale blade, 23s. 6d. per lb. on the spot.

Menthol. — Chinese, 67s. 6d. per lb., duty paid as to seller; shipment not offering. Brazilian, 54s. 6d., in bond; 54s. 6d., c.i.f.

Nutmegs. — West Indian 80's 12s. per lb., spot: sound unassorted, 9s. 6d.; defectives, 7s. 8d.

Nux vomica.—Spot, 125s., cwt.; shipment, 105s., c.i.f.

Orange peel. — Spot: Sweet ribbon, 2s. per lb.; bitter quarters: West Indian, 1s.; Spanish, 1s. 9d.; bitter ribbon, 1s. 6d.

Orris root.—Florentine, 350s. per cwt.

Papain.—Tanganyikan, 14s. 6d. per lb., c.i.f., for grade one, spot, 17s. Ceylon, No. 1 white, 14s. 6d., c.i.f.: brown, 13s., c.i.f.

Pepper.—White Sarawak spot 5s. 7½d. per lb.; shipment, 5s. 5½d., c.i.f. Black Sarawak, 4s. spot and c.i.f. Black Malabar, 500s. per cwt. spot; 530s., c.i.f.

Peppermint leaves. — Dutch whole, 1s. 11d. to 2s. 7d. per lb., c.i.f.

Pimento. — Spot, 590s. cwt.; shipment, 540s., f.o.b.

Podophyllum. — *Emodi,* 200s. per cwt. spot, and 185s., c.i.f., for shipment. *Peltatum,* spot value, 375s.

Pyrethrum.—Extract, minimum, 25 per cent. w/w pyrcthrins, 75s. per lb. for small lots.

Quassia. — Spot, 55s. per cwt., ex wharf.

Quillaia.—Spot whole bark, 110s. per cwt.; crushed, 145s. Whole for shipment, 97s. 6d., c.i.f.

Rhubarb. — Chinese small round from 5s. 9d. to 6s. 9d. per lb. on the spot.

Saffron.—Mancha selecta, 147s. 6d. per lb.

Sarsaparilla.—Jamaican native red on spot, 2s. 6d. per lb.; shipment, 2s., c.i.f.

Seeds. — (Per cwt.). Anise.—Bulgarian, 125s.; Turkish, 127s. 6d.; Spanish, 165s., all duty paid. Caraway. — Dutch 155s., duty paid. Celery.—Indian, 140s., spot sellers; shipment, 120s., c.i.f., quoted. Coriander. — Moroccan, 47s. 6d., duty paid sellers; shipment, 42s. 6d., c.i.f., sellers. Cumin.—Indian, 235s., spot; Iranian, 250s., duty paid. Dill.—Indian, short at 100s., nominal; shipment, 80s., c.i.f. Fennel.—Chinese quoted at 110s., spot; Indian, 125s. Fenugreek. — Moroccan, 54s., duty paid. Mustard. — English, 85s. to 97s. 6d., according to quality.

Senega.—Spot, 18s. 9d. per lb.

Senna. — *Tinnevelly* leaves, prime No. 1, 1s. 5d. per lb., f.a.q.; No. 3, 9d. Pods: manufacturing (f.a.q.), 10d. and hand-picked, 1s. 6d. to 1s. 10d. *Alexandria* pods: Manufacturing, 1s. 6d.; new crop hand-picked, 5s. to 6s.

Shellac.—F.O.T.N., 200s. per cwt.; No. 1, 222s. 6d.; F.O., 232s. 6d. to 282s. 6d., spot.

Squill.—White 85s. per cwt., spot.

Stramonium. — Indian leaves 60s. per cwt., spot. Dutch 0·5 per cent. alkaloid 93s., c.i.f.

Styrax. — Spot, 33s. per lb., shipment, 32s., c.i.f.

Tonquin beans.—Para spot, 7s. 9d. per lb. Shipment about 7s. c.i.f. Angostura 11s.

Tragacanth. — No. 1 ribbon, £135 to £140 per cwt. No. 2, £125 to £130.

Turmeric. — Madras finger on spot is 100s. per cwt.; new crop, prompt shipment, 85s., c.i.f.

Valerian root. — Spot: Indian (with rootlets), 130s. and Belgian, 175s. per cwt. Dutch whole (max. 2½ per cent. sand) for prompt shipment, 173s., c.i.f.

Vanillin.—Rates (per lb.) are now:—5-cwt. lots, 23s. 3d.; 1-cwt., 23s. 6d.; 56-lb., 23s. 9d.; smaller quantities, 24s.

Waxes. — (Per cwt.). Bees'.—Dar-es-Salaam, spot, 485s.; shipment, 480s., c.i.f. Abyssinian, spot 410s. in bond; shipment, 405s., c.i.f. Benguela, shipment, 380s., c.i.f. Sudanese, spot, 450s.: shipment, 380s., c.i.f. Candelilla, spot, 475s. Carnauba, fatty grey, spot, 600s.; shipment, 585s., c.i.f.; prime yellow, spot, 880s., shipment, 810s., c.i.f.

Essential and Expressed Oils

Cananga.—Spot, from 40s. to 47s. 6d. per lb.

Caraway.—Imported oil, 27s. 6d. to 37s. 6d. per lb.

Citronella. — Ceylon, spot, 7s. 2d.; shipment, 6s. 10d. per lb., c.i.f. Formosan weak, spot, 6s. 6d., in bond; shipment, 6s. 2d., c.i.f.

Cinnamon. — From quillings, best English-distilled is 50s. per oz.; other B.P. oils from 165s. per lb. Ceylon leaf, spot, 9s. 9d. per lb.; rectified, 11s. 6d. per lb.; Seychelles, 8s. 6d., spot.

Cod-liver. — B.P. is 11s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

Coriander.—B.P. oil, 52s. 6d. per lb., spot.

Cubeb.—Small spot supplies of imported are 65s. per lb.; English, 90s.

Cumin.—Imported oil, 90s. per lb.

Dill.—Imported, 27s. 6d. per lb., spot.

Eucalyptus. — Australian 70 to 75 per cent. eucalyptol on the spot is 3s. 6d. per lb. 80–85 per cent., 4s. Spanish (70–75), 3s. 6d. spot. Chinese 3s. to 3s. 6d., duty paid.

Fennel. — Spanish sweet, spot, 11s. per lb.

Ginger.—Imported; Jamaican, 130s. per lb.; Chinese, 72s. 6d., duty paid.

Gingergrass.—Spot 27s. 6d. per lb.

Grapefruit. — Jamaican, 15s. per lb. spot. Florida, 17s. spot.

Juniper. — B.P.C. 1949 oil is from 12s. 6d. per lb. on the spot. English-distilled, 180s. Juniper wood, from 5s.

Lavandin.—Spot, 6s. to 9s. per lb. for original drums.

Lavender.—From 24s. to 37s. 6d. per lb. as to quality.

Lemongrass. — Spot, 12s. 9d. per lb., and May shipment, 12s. 5d.; new crop, May–June, 11s. 9d.

Lime.—West Indian distilled, 51s. per lb. on the spot.

Nutmeg.—Imported B.P. oil is 90s. per lb. English-distilled 100s.

Otto of rose.—Bulgarian, 400s. per oz.

Palmarosa. — Spot, 37s. 6d., per lb., 35s. 6d., c.i.f.

Patchouli. — Penang is 42s. 6d. duty paid and 37s., c.i.f. per lb.

Peppermint. — *Arvensis:* Chinese spot, 37s. 6d. per lb. Brazilian, 17s. spot and shipment, 17s., c.i.f. *Piperita:* Italian " Mitcham-type " from 42s. 6d. to 48s. 6d.; American, 26s. to 30s., as to origin.

Pimento. — English-distilled berry, 167s. 6d. per lb.; imported, 77s. 6d. Rectified leaf 27s. 6d. per lb. for small lots.

UNITED STATES REPORT

New York, May 3: Export demand for Glycerin was expected to reach last year's record of 21 million lb. or possibly surpass that peak level. Nicotinic acid was lower at $4·30 per kilo, down 50 cents. Brazilian Menthol declined by 30 cents to $8·20 per lb. Higher per lb. among Crude Drugs were Sarsaparilla at 33 cents, up three cents; powdered Karaya at 39 cents, up three cents; and Gum acacia, at 25 cents, up 2½ cents. Lower per lb. were Belladonna leaves at 23 cents, down five cents, and Bourbon Vanilla beans at $12·75, down 50 cents. Higher per lb. among Essential Oils were Cedar leaf at $3·25, up 15 cents, and Cedarwood at 75 cents, up five cents. Lower were Coriander at $8·75, down 75 cents; Peruvian Bois de rose at $1·85, down 20 cents; and Formosan Citronella at $1·05, down five cents.

CUMULATIVE LIST OF AMENDMENTS TO THE
C. & D. Quarterly Price List, *March 1*

A=Advanced; R=Reduced. ENTRIES NEW THIS WEEK ARE MARKED WITH AN ASTERISK*

	1001 (944 PCP)								
	furniture barrier cream		20	0	..	..	2	6	
			36	0	..	..	4	6	
	Accura 3 (1391 CHB)								
	electric shaver super		..		..	..	210	0	
	sport		..		..	..	175	0	
Delete	Aerosporin (208 BW)								
	ointment	10 gm	..		..	..			
	Actriol (917 Organon) cream								
		15 gm	120	0	..	..	15	0	
Delete	Adexolin (518 Glaxo)								
	liquid	16 oz	..		..	..			
	Adrenor (604 Hewlett) L-noradrenaline								
	ampoules 2 mils	6	33	0	..	..	3	8	pl
		100	447	0	..	..	49	8	pl
	4 mils	6	54	0	..	..	6	0	pl
		100	729	0	..	..	81	0	pl
	Adreson (917 Organon)								
	tablets 5 mgm	40	7	4ea		..			TS
		100	17	4ea		..			TS
		500	77	6ea		..			TS
	25 mgm	20	14	6ea		..			TS
		40	28	6ea		..			TS
		100	69	0ea		..			TS
		500	338	0ea		..			TS
	Akineton (708 Knoll)								
	tablets	20	30	0	..	..	3	4	
		50	54	0	..	..	6	0	
		200	180	0	..	..	20	0	
	ampoules	6	48	0	..	..	5	4	
		30	204	0	..	..	22	8	
	Albion (339 CG)								
	cotton wool	½ oz	4	2	..	..			
		1 oz	5	3	..	..			
		2 oz	8	3	..	..			
		4 oz	13	9	..	..			
		8 oz	23	9	..	..			
		1 lb	3	7½ea		..			
A	**Albion** (25 AS)								
	ichthammol soap		8	10	2	2	1	2	
	Allenbury's (34 A&H)								
	pastilles sugarless	2 oz	15	9	..	..	1	9	
	Aminopterin (746 Lederle)								
	tablets	100	33	4ea		..	50	0	
	Ampins (399 CG)								
	for bee keepers, box of 3 No 9B		4	9ea		..	6	0	pl
	5		7	9ea		..	9	9	pl
R	**Anacobin** (179 BDH)								
	ampoules 100 mcgm/mil	6	30	0	..	..	3	9	
		25	126	0	..	..	15	9	
	1000 mcgm/mil	6	60	0	..	..	7	6	
		25	450	0	..	..	56	3	
	Andre Philippe (48 AP)								
	liquid shampoo 22	4 oz	10	0	2	6	1	6	
	men's lacquer aerosol 101		30	0	15	0	5	0	
	Andre Philippe (48 AP)								
	men's roll-on		16	10	4	2½	2	6	
	Andy (1392 TT)								
	nylon pile beauty mitt		45	6	..	..	5	11	
	Anaesthetic Ether Keiths (787 Macfarlan)								
		250 mils	44	0	..	..			
		250 mils	52	0	..	..			
A	**Ann French** (655 ICC)								
	golden tan		18	0 ..	9	0	2	9	
	cleansing cream		15	9	7	11	2	6	
	Arthene (347 Dalmas)	1 oz	20	0	5	0	2	11	
		2 oz	23	0	5	9	3	4	
	Ascon (37 Allied)	dp 80 oz	29	5ea		..			pls7
	Aspergum (1330 White)	16	15	4	3	10	2	2	
		36	33	0	8	3	4	6	
		dp 250	216	0	..	..	24	0	
	Auto-Transparol (980 Photopia)								
	photo corners	200	..		..	..	3	2	
	Ayroware (78 AS&Co)								
	rubber gloves		28	0	1	5	3	6	
	Bahama Homesun (1373 Hanovia)								
	lamp		..	..	45	0ea	285	0	
Delete	Banocide (208 BW)								
	(Vet.), 200 mgm	10	..		..	..			
	Barosil (267 C&A)	dp 1 lb	180	0	..	..			
	Bartex (477 AF&B)								
	superlens sunglasses		..		..	..	7	11	
							12	9	
							15	11	
	superlens clipovers		..		..	..	7	6	
	Becovite (1285 Vitamins)								
	tablets	100	40	0	..	..	5	0	
		500	160	0	..	..	20	0	
		1000	300	0	..	..	37	6	
	Bemaphate (142 BML)								
	tablets	25	45	0	..	..	5	7½	
		100	147	0	..	..			
		500	55	0ea		..			
	Bemasulph (142 BML)								
	tablets	25	45	0	..	..	5	7½	
		dp 100	147	0	..	..			
		dp 500	61	6 ea		..			
	Benylin (938 PD)	4 oz	24	0	6	0	3	6	
	Bikini Homesun (1373 Hanovia)								
	lamp		..	..	58	0ea	368	2	
	Biocortar (61 APC)								
	hydrocortisone snuff insufflator with six capsules		9	2ea		..	13	9	TS
	refill capsules	6	70	0	..	..	8	9	TS
		25	17	4ea		..	26	0	TS
		100	66	2ea		..	99	3	TS
	Bis-Pep (549 Guest)								
	tablets		6	6	1	7½	1	3	
R	**Bisodol** (655 ICC) powder		30	3	7	7	4	0	
A	tablets	30	15	2	3	10	2	0	
		100	36	0	9	0	4	9	
	Bitonin (147 Boots) tonic								
	tablets	36	16	0	..	..	2	0	
		72	28	0	..	..	3	6	
	Boldoot (639 HH)								
	towelette	5	..		..	..	2	3	
Delete	Bon-Accord (859 Moore) universal face mask.								
	B-R (1023 Radiol)								
	Bone Radiol (horses and dogs)	5 oz	94	6	23	7½	12	6	
		½ gal	99	0ea	24	9ea	156	10	
		1 gal	185	6ea	46	4½ea	294	0	
	healing jelly	2 oz	19	0	4	9	2	6	
	Bronchodil (142 BML)	25	30	0	..	..			pls1s4A
		100	105	0	..	..			pls1s4A
		500	32	0ea		..			pls1s4A
	Broprin (195 Brook Parker)								
	tablets	dp 3×100	7	6	..	..			
Delete	Brovon (859 Moore)								
	bronchial mixture	4 oz							
		dp 80 oz							
	elixir	4 oz							
		dp 20 oz							
	tablets	100							
		dp 500							
	Brownie (711 Kodak)								
	reflex 20 camera		..		..	..	87	2	
	case		..		..	..	11	1	
	Burcillin-P 100 (208 BW)								
	procaine penicillin intramammary injection, 100,000 units (Vet)	12	108	0	..	..	12	0	
*	**Calcipen-V** (147 Boots)								
	125 mgm	60 mils	106	0	..	..	13	3	TS
	Calcium disodium Versenate (1061 Riker)								
	tablets	100	192	0	..	..	24	0	
		500	864	0	..	..	108	0	
	ampoules 5 mil	6	336	0	..	..	42	0	
	veterinary solution	100 mils	216	0	..	..	27	0	
	Californian Poppy (677 JK)								
	eau de toilette	7062	28	8	14	0	4	9	
	'Pak-a-Soap' (3)	4824	17	11	4	4	2	6	
	Calvert's (219 Calvert)								
	No. 5 carbolic soap, twin bar		10	0	..	..	1	0	
*	**Cambison** (614 Hoechst) ointment (distributors 621 Horlicks)								
	0·25%	5 gm	40	0	9	9	5	10	TS
		20 gm	128	0	31	2	18	7	TS
	0·5%	5 gm	64	0	15	7	9	3½	TS
		20 gm	204	0	49	9	29	8	TS
	Camyna (969 Pfizer)								
	tincture	20 mils	4	3ea	1	0¾ea	7	6	
	lotion	20 mils	4	0ea	1	0ea	7	0	
	Carbellon (830 Medo)	50	18	0	4	6	2	7½	
	Carters (1003 PP)								
	little liver pills		9	7 4 doz	2	5 4 doz		4	
Delete	Cebeviton (676 Johnston)								
	tablets		..		..	..			
	elixir		..		..	..			
	Censedal (814 M&B)								
	tablets 60 mgm	25	18	0	..	..	2	3	pls1s4A
		500	220	0	..	..	27	6	pls1s4A
	200 mgm	25	40	0	..	..	5	0	pls1s4A
		500	560	0	..	..	70	0	pls1s4A
*	**Centyl** (747 Leo)								
	tablets 2·5 mgm	25	36	0	..	..	4	0	
		100	138	0	..	..	15	4	
		500	52	0ea		..	69	4	
	5·0 mgm	25	66	0	..	..	7	4	
		100	231	0	..	..	25	8	
		500	92	9ea		..	123	8	
	Ceraban (339 CG)								
	diachylon bandage	3 in	58	9	..	..	6	10½	
		4 in	76	9	..	..	9	0	
	Cestra (1073 Robinson)								
	face mask		116	2 gross		..	12	11 doz	
	Chandau (116 Benton)								
	hair lacquer aerosol		39	0	19	6	6	6	
	setting spray aerosol		39	0	19	6	6	6	
	Chantilly (Houbigant (1 Abbey))								
	perfume purse diffuseur		..		..	..	42	0	
	refill		..		..	..	27	6	
	Choice (1388 Durazone)								
	air purifier	12 oz	52	10	..	..	5	6	
	fly killer	12 oz	52	10	..	..	5	6	
	disinfectant	5½ oz	11	9	..	..	1	3	

		9½ oz	18	9	..	..	2	0	
	air purifier aerosol ..		..		..	..	2	11	
	fly killer aerosol ..		..		..	..	2	11	
	moth proofer aerosol ..		..		..	..	2	11	
	Christmas in July (150 Bourgois)								
	skin perfume		..		..	..	8	6	
	perfume purse flacon ..		..		..	..	9	6	
	presentation		..		..	..	19	6	
	"Spray Mist"		..		..	..	17	6	
	cologne stick		..		..	..	5	6	
	toilet soap	3	..		..	..	5	9	
	bath cubes	6	..		..	..	4	6	
	talcum		..		..	..	5	6	
	cologne		..		..	..	10	6	
	Christy (261 Christy)								
	lanolin shampoo ..		5	8	1	5		9	
	Cilopitne (768 Cilag)	5 mils	48	0	12	0	7	0	
	Clinic (509 Gibbs)								
	medicated shampoo sachet		3	11¾	1	1		7	
	bottle		15	2¾	4	1½	2	3	
			27	1	7	4	4	0	
	Clip-On Roll (888 Newey)								
	hair rollers		10	3	2	6¾	1	6	
							card		
	Cobalin (930 P&B)								
	insufflation capsules ..	25	112	0	..	..	14	0	
		100	46	0ea		..	52	0	
	Outfit		152	0	..	..	19	0	
Delete	Codasphen (859 Moore)								
	tablets	100							
		dp 500							
	Codelcortone (837 MSD)								
	tablets 1 mgm ..	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm ..	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
Delete	Codella (859 Moore) foam	6 oz							
	Codilax (549 Guest) ..		12	6	3	1½	2	0	pl
	Cogentin (837 MSD)								
	tablets, 2 mgm ..	500	130	0ea		..	195	0	pls1s4B
	Compactoid (339 CG)								
	boil plasters		8	0	2	0	1	1½	
	Compocillin VK (2 Abbott)								
	capsules 125 mgm ..	500	172	6ea		..	258	9	TS
	250 mgm ..	250	176	4ea		..	264	6	TS
		500	343	0ea		..	514	6	TS
	Co-Pyronil (413 Lilly)								
	Pulvules	25	4	0ea	1	0ea	7	0	
		100	12	0ea	3	0ea	21	0	
		1000	110	0ea	27	6ea	192	6	
	Cortef (1263 Upjohn)								
	acetate ointment 1%	20 gm	9	0ea		..			TS
		50 gm	18	9ea		..			TS
	2½%	5 gm	6	0ea		..			TS
		20 gm	19	0ea		..			TS
		50 gm	43	6ea		..			TS
	ointment BNF 1%	20 gm	9	0ea		..			TS
		50 gm	18	9ea		..			TS
	2½%	5 gm	6	0ea		..			TS
		20 gm	19	0ea		..			TS
		50 gm	43	6ea		..			TS
	suspension ..	5 mils	6	0ea		..			TS
	Cortelan (518 Glaxo)								
	tablets 5 mgm ..	50	8	9ea		..	11	8	TS
	25 mgm ..	40	28	6ea		..	38	0	TS
		100	69	0ea		..	92	0	TS
		500	338	0ea		..	450	8	TS
	Cortisone (837 MSD)								
	acetate tablets 5 mgm	50	8	9ea		..			TS
	25 mgm	40	28	6ea		..			TS
		100	69	0ea		..			TS
		500	338	0ea		..			TS
	Cortisone (1306 WCL) acetate								
	tablets 5 mgm ..	100	16	10ea		..			TS
		500	77	6ea		..			TS
	25 mgm ..	100	67	3ea		..			TS
		500	329	6ea		..			TS
	Cortisone (1263 Upjohn)								
	tablets 25 mgm ..	20	14	3ea		..			TS
		40	28	6ea		..			TS
	Cortisporin (208 BW)								
	lotion	10 mils	135	0	..	..	15	0	
	Cortistab (147 Boots)								
	tablets 5 mgm ..	40	7	0ea		..	9	4	TS
		100	17	3ea		..	23	0	TS
		500	79	6ea		..	106	0	TS
	25 mgm ..	40	28	6ea		..	38	0	TS
		100	69	0ea		..	92	0	TS
		500	338	0ea		..	450	8	TS
	Cortisyl (1087 Roussel)								
	tablets 5 mgm ..	20	42	0	..	..	5	3	TS
		500	930	0	..	..	116	3	TS
	25 mgm ..	20	174	0	..	..	21	9	TS
		40	342	0	..	..	42	9	TS
		100	828	0	..	..	103	6	TS
		500	4056	0	..	..	507	0	TS
	Cortoderm (324 Crookes)								
	0.5%	10 gm	36	0	9	0	5	3	TS
	1%	10 gm	60	0	15	0	8	9	TS
	Cortoderm N (324 Crookes)								
	0.5%	10 gm	48	0	12	0	7	0	TS
	1%	10 gm	72	0	18	0	10	6	TS
	Cortril (969 Pfizer)								
	intra-articular injection								
	25 mgm/mil ..	5 mils	6	0ea		..			TS
	ophthalmic ointment								
	0·5% ..	3 gm	2	0ea		..			TS
	2·5% ..	3 gm	4	8ea		..			TS
	tablets 10 mgm ..	25	9	0ea		..			TS
		100	34	6ea		..			TS
	20 mgm ..	20	14	4ea		..			TS
		100	69	0ea		..			TS
	topical ointment non-greasy								
	0·5% ..	5 gm	2	0ea		..			TS
		15 gm	4	6ea		..			TS
	1·0% ..	5 gm	3	3ea		..			TS
		15 gm	6	9ea		..			TS
		50 gm	18	9ea		..			TS
	2·5% ..	5 gm	6	0ea		..			TS
		15 gm	14	3ea		..			TS
		50 gm	43	6ea		..			TS
	greasy 1·0% ..	5 gm	3	3ea		..			TS
		15 gm	6	9ea		..			TS
	2·5% ..	5 gm	6	0ea		..			TS
		15 gm	14	3ea		..			TS
	lotion 0·5% ..	20 mils	5	0ea		..			TS
	1·0% ..	20 mils	8	3ea		..			TS
	lotion 0·5% with								
	neomycin ..	20 mils	5	6ea		..			TS
	1·0% ..	20 mils	8	9ea		..			TS
	Coryzin (499 Richter)								
	tablets	50	36	0	..	..	4	6	
		250	12	4ea		..	18	6	
		500	23	0ea		..	34	6	
		1000	44	0ea		..	66	0	
	Coty (301 Coty)								
	cream powder in golden								
	vanity	2099	61	0	29	9	10	6	
	foundation lotion ..	2 oz	37	0	18	0	6	6	
	nail enamel "pearlidescent"		48	0	23	5	8	9	
	"super-sheen"		37	0	18	0	6	6	
	remover		33	0	16	1	5	9	
	"vanite parisienne" ..	2098	84	0	41	0	14	6	
	powder refill ..		26	0	12	8	4	6	
Delete	special astringent in glass bottle	2 oz	33	0	16	1	5	9	
Delete	avocado beauty milk in glass bottle	4 oz	43	0	21	0	7	6	
Delete	skin freshener in glass bottle	4 oz	37	0	18	0	6	6	
Delete	eye shadow in pink and blue plastic container		25	0	12	2	4	3	
Delete	foundation lotion in glass bottle	2 oz	25	0	12	2	4	3	
	Cremotresamide (837 MSD)								
		16 oz	19	0ea		..	28	6	
	Crystapen G (518 Glaxo)								
	granules 125 mgm ..		5	8ea		..	8	6	TS
	Cussons (388 Cussons)								
Delete	musk rose soap ..	2154	..		..	..			
Delete	greensleeves luxury soap	2085	..		..	..			
Delete	four leaf clover luxury soap	2083	..		..	..			
	Cytamen (518 Glaxo)								
	ampoules 100 mcgm 1 mil	6	30	0	..	..	3	4	
	250 mcgm	6	42	0	..	..	4	8	
	1000 mcgm	3	60	0	..	..	6	8	
		6	108	0	..	..	12	0	
	Dalmas (347 Dalmas)								
	first aid dressings ..		7	6	..	..		10½	
			15	0	..	..	1	9	
*	**Daneral** (614 Hoechst) tablets (distributors 621 Horlicks)								
	10 mgm	20	20	0	..	..	2	6	
		250	192	0	..	..	24	0	
	50 mgm	10	16	0	..	..	2	0	
		100	144	0	..	..	18	0	
	DCL (378 TDC)								
	yeast tablets gr 5 ..	50	1	6ea		..	2	3	
		100	2	6ea		..	3	9	
		1000	20	0ea		..	30	0	
	Deaner (1061 Riker)								
	tablets	100	264	0	66	0	38	6	
		500	1080	0	270	0	157	6	
	Decortisyl (1087 Roussel)								
	tablets 1 mgm ..	100	108	0	..	..	13	6	TS
		500	432	0	..	..	54	0	TS
	5 mgm ..	30	132	0	..	..	16	6	TS
		100	390	0	..	..	48	9	TS
		500	1860	0	..	..	232	6	TS
	Definol (673 J of H)								
	developer ..	100 mils	..		..	..	3	0	
		500 mils	..		..	..	10	0	
	Delfen (922 Ortho)								
	with applicator ..		76	0	..	..	9	6	
	tube only		56	0	..	..	7	0	
	Delta-Cortef (1263 Upjohn)								
	tablets 5 mgm ..	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Delta-Cortelan (518 Glaxo)								
	tablets 1 mgm ..	100	9	0ea		..	12	0	TS
		500	36	0ea		..	48	0	TS
	5 mgm ..	30	11	0ea		..	14	8	TS
		100	32	6ea		..	43	4	TS
		500	155	0ea		..	206	8	TS
	Deltacortone (837 MSD)								
	tablets 1 mgm ..	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm ..	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Delta-Cortril (969 Pfizer)								
	tablets 1 mgm ..	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm ..	20	7	4ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	intramuscular injection								
	25 mgm/mil	5 mils	23	0ea		..			TS

	enteric-coated tablets								
	2·5 mgm	100	22	6ea		..			TS
		500	108	3ea		..			TS
	Delta-Genacort (502 Genatosan)								
	tablets 1 mgm	100	108	0		..			TS
		500	36	0ea		..			TS
	5 mgm	20	93	0		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Deltastab (147 Boots)								
	injection 25 mgm 5 mil vial		23	0ea		..	**30**	**8**	TS
	tablets 1 mgm	30	2	9ea		..	**3**	**8**	TS
		100	9	0ea		..	**12**	**0**	TS
		500	36	0ea		..	**48**	**0**	TS
	5 mgm	30	11	0ea		..	**14**	**8**	TS
		100	32	6ea		..	**43**	**4**	TS
		500	155	0ea		..	**206**	**8**	TS
	Deltastab B (147 Boots)								
	tablets 5 mgm	30	11	0ea		..	**14**	**8**	TS
		100	32	0ea		..	**43**	**4**	TS
		500	155	0ea		..	**206**	**8**	TS
R	**Dentiline** (430 Eucryl)		20	0	5	0	**2**	**9**	
	refill		17	4	4	4	**2**	**5**	
	Dethlac (506 Gerhardt)		44	0	..	..	**4**	**11**	
	DF 118 (394 Duncan)								
	tablets 30 mgm	25	60	0	..	..	**7**	**6**	s1
		100	200	0	..	..	**25**	**0**	s1
		500	850	0	..	..	**106**	**3**	s1
	Di-Ademil-K (1176 Squibb)								
	tablets	24	3	9ea		..	**5**	**7½**	
		100	14	6ea		..	**21**	**9**	
		500	65	0ea		..	**97**	**6**	
	Di-Adreson (917 Organon)								
	tablets 1 mgm	30	3	2ea		..			TS
		100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Di-Adreson-F (917 Organon)								
	tablets 1 mgm	30	3	2ea		..			TS
		100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Dipasic (503G) tablets	100	12	0ea		..			TS
		500	54	0ea		..			TS
		1000	96	0ea		..			TS
Delete		5000							TS
	Disamide (179 BDH)								
	tablets	25	54	0	..	..	**6**	**9**	
		100	156	0	..	..	**19**	**6**	
		500	56	0ea		..	**84**	**0**	
	Distivit (378 TDC) B12								
	ampoules 100 mcgm	5	2	1ea		..	**3**	**1½**	
	250 mcgm	5	2	11ea		..	**4**	**4½**	
	1000 mcgm	5	7	6ea		..	**11**	**3**	
	100 mcgm/mil	5 mil vial	1	11ea		..	**2**	**10½**	
	1000 mcgm/mil	5 mil vial	7	2ea		..	**10**	**9**	
Delete	Distaquaine (208 BW)								
	suspension (vet)								
	300,000 units/mil	10 mils	..		..	..			
		30 mils	..		..	..			
	Distaquaine (378 TDC)								
	suspension (vet)	90 mils	36	6ea		..	**54**	**9**	p1TS
	Distaquaine-V (378 TDC)								
	tablets 125 mgm	100	36	6ea		..	**54**	**9**	TS
	Distaquaine V-K (378 TDC)								
	suspension	2 oz	8	10ea		..	**13**	**3**	TS
	Dorminal (147 Boots)								
	tablets, gr. 3	100	66	0	..	..	**8**	**3**	p1s1s4A
	Durophet (1061 Riker) capsules								
	7·5 mgm	30	52	0	..	..	**6**	**6**	p1s1s4B
		300	344	0	..	..	**43**	**0**	p1s1s4B
	12·5 mgm	30	56	0	..	..	**7**	**0**	p1s1s4B
		300	372	0	..	..	**46**	**6**	p1s1s4B
	20 mgm	30	64	0	..	..	**8**	**0**	p1s1s4B
		300	416	0	..	..	**52**	**0**	p1s1s4B
	Dylon (816 Mayborn)								
	wash-creme		22	6	..	..	**2**	**6**	
	Efcortelan (518 Glaxo)								
	lotion ¼%	20 mils	3	3ea		..	**4**	**4**	TS
	½%	20 mils	5	0ea		..	**6**	**8**	TS
		100 mils	18	9ea		..	**25**	**0**	TS
	1%	20 mils	8	3ea		..	**11**	**0**	TS
		100 mils	35	6ea		..	**47**	**4**	TS
	intra-articular injection								
	1 mil × 6		8	3ea		..	**11**	**0**	TS
		5 mils	6	0ea		..	**8**	**0**	TS
	ointment Nos. 1 & 2								
	½%	15 gm	4	6ea		..	**6**	**0**	TS
	1%	15 gm	6	9ea		..	**9**	**0**	TS
		50 gm	18	9ea		..	**25**	**0**	TS
	2½%	5 gm	6	0ea		..	**8**	**0**	TS
		15 gm	14	3ea		..	**19**	**0**	TS
		50 gm	43	6ea		..	**58**	**0**	TS
	tablets 20 mgm	100	69	0ea		..	**92**	**0**	TS
	Efcortelan-N (518 Glaxo)								
	eye/ear drops	3 mils	3	7½ea		..	**4**	**10**	TS
	eye ointment	3·5 gm	3	0ea		..	**4**	**0**	TS
	intra-articular injection								
		5 mils	6	3ea		..	**8**	**4**	TS
	lotion ½%	20 mils	5	6ea		..	**7**	**4**	TS
	1%	20 mils	8	9ea		..	**11**	**8**	TS
	ointment Nos. 1 & 2	5 gm	3	6ea		..	**4**	**8**	TS
		15 gm	7	3ea		..	**9**	**8**	TS
	Elliman's (414 Elliman)								
	(distributor, 994 P&M)								
	" universal " embrocation								
		3929	47	4	11	10	**6**	**4**	
	Emmotone (571 Stagg)	6 oz	24	0	6	0	**3**	**6**	
		80 oz	20	0ea		..			
	Endoxana (1305 WB)								
	vials 100 mgm	10	40	0ea	10	0ea	**70**	**0**	
	200 mgm	10	53	4ea	13	4ea	**93**	**4**	
	tablets 50 mgm	50	22	0ea	5	6ea	**38**	**6**	
		250	100	0ea	25	0ea	**175**	**0**	
	Energen (421 Energen)								
	crispbread	6 oz	..		..	..	**1**	**6**	
Delete	Enseals (413 Lilly) ferrous sulphate								
	Episol (324 Crookes)								
	lotion	30 mils	36	0	..	..	**4**	**6**	
	cream	30 gm	36	0	..	..	**4**	**6**	
	dusting powder	30 gm	36	0	..	..	**4**	**6**	
	Epitone (147 Boots)	8 oz	26	0	..	..	**3**	**9**	
			45	0	..	..	**6**	**6**	
	Esidrex K (262 Ciba)								
	tablets	25	54	0	..	..	**6**	**9**	
		100	20	0ea		..	**25**	**0**	
		500	81	4ea		..	**122**	**0**	
	Ethyl chloride (394 Duncan)								
		100 mils	50	0	..	..	**6**	**3**	
	Etisul T (649 ICI) cream	5 gm	32	0	..	..	**4**	**0**	
	Eupinal (339 CG)								
	with ephedrine	8 oz	56	0	14	0	**8**	**4**	
	Evan Williams (437 EW)								
	shampoo cream	tube	18	5	4	7	**2**	**6**	
✻	**Eyemakers a la Carte** (1052 Revlon)								
	eyebrow pencil propelling		72	0	36	0	**12**	**6**	
	refills (3)		27	0	13	6	**4**	**6**	
	eyebrow pencil short		36	0	18	0	**6**	**0**	
	eye liner pencil		45	0	22	6	**7**	**6**	
	frosted		57	0	28	6	**9**	**6**	
	eye shadow stick		51	0	25	6	**8**	**6**	
	eye shadow pan		87	0	43	6	**14**	**6**	
	gold, silver, gold bronze		105	0	52	6	**17**	**6**	
	platinum, platinum/gold		147	0	73	6	**24**	**6**	
	eye liners liquid		63	0	31	6	**10**	**6**	
	frosted		87	0	43	6	**14**	**6**	
	eye lash tipping		129	0	64	6	**21**	**6**	
	eye shadow brush		72	0	36	0	**10**	**6**	
	eyebrow brush		31	0	15	6	**4**	**6**	
	eye liner pencil sharpener		45	0	22	6	**6**	**6**	
	liquid liner brush		65	0	32	6	**9**	**6**	
	mascara cake		45	0	22	6	**7**	**6**	
	refills		30	0	15	0	**5**	**0**	
	roll on		81	0	40	6	**13**	**6**	
	refills		52	6	26	3	**8**	**9**	
	frosted roll on		93	0	46	6	**15**	**6**	
	remover pads		63	0	31	6	**10**	**6**	
✻	**Fabahistin** (452 FBA)								
	tablets 50 mgm	10	20	0	..	..	**2**	**6**	
		250	456	0	..	..	**57**	**0**	
	Falapen (394 DF)tablets	100	55	0ea		..	**82**	**6**	TS
	Feedrite (454 Feedrite)								
	polythene bottle	4 oz	11	0	..	..	**1**	**4**	
	spare polythene	8 oz	14	0	..	..	**1**	**8**	
	Feen-a-Mint (1330 White)	6	7	0	1	9	**1**	**0**	
		16	15	4	3	10	**2**	**2**	
	Fennings (1100 JS)								
	baby powder		14	6	3	7½	**1**	**11**	
	Ferroids (1061 Riker)	100	80	0	..	..	**10**	**0**	
		1000	656	0	..	..	**82**	**0**	
A	**Fibrosine** (655 ICC) balm		26	6	6	8	**3**	**6**	
	Finesse (327 WC)								
	deodorant spray		28	6	14	3	**4**	**9**	
	First aid dressing pack	(1390 SFA)	18	0	..	..	**2**	**0**	
	Fisons (463 Fisons)								
	hedge setter	4 oz	..		..	..	**5**	**0**	
		8 oz	..		..	..	**9**	**6**	
	Evergreen fertiliser distributor		..		..	..	**59**	**6**	
	spot weeder aerosol		..		..	..	**5**	**6**	
	Flatterie (Houbigant (1 Abbey))								
	perfume purse diffuseur		..		..	..	**45**	**0**	
	refill		..		..	..	**30**	**0**	
	Frantin (208 BW) brand								
	dispersible powder (Vet)								
		250 gm	675	0	..	..	**75**	**0**	
	Freemans (479 WF)								
	bathing cap Chic	1B5	21	0	1	0	**2**	**9**	
	Sea Child	1B7	19	6	1	0	**2**	**6**	
	Diver	1B6	21	0	1	0	**2**	**9**	
	Girl	1B8	21	0	1	0	**2**	**9**	
	Maid	1B4	28	6	2	0	**3**	**9**	
	Frescabel (726 Lancome)								
	cream	1⅛ oz	..		..	..	**22**	**6**	
		2 oz	..		..	..	**31**	**6**	
	Frozoclone (365 Demuth) (distributors 261 Christy)		24	0	12	0	**4**	**0**	
	Frozolavender (365 Demuth) (distributors 261 Christy)		24	0	12	0	**4**	**0**	
	Gamgee (1073 Robinson) tissue								
	NHS No. 3 pink label	2 oz	5	8¼lb		..		**11½**	
		4 oz	5	1¼lb		..	**1**	**8½**	
		8 oz	4	9 lb		..	**3**	**2**	
		16 oz	4	5¾ea		..	**6**	**0**	
	BPC blue labe	2 oz	7	1¾lb		..	**1**	**2½**	
		4 oz	6	6¾lb		..	**2**	**2**	
		8 oz	6	2½lb		..	**4**	**1½**	
		16 oz	5	11¼ea		..	**7**	**11**	
	yellow label	2 oz	9	0lb		..	**1**	**6**	
		4 oz	8	5¼lb		..	**2**	**10**	
		8 oz	8	1 lb		..	**5**	**4½**	
		16 oz	7	9¾lb		..	**10**	**5**	
	pneumonia jacket	size 1	24	9	..	..	**2**	**9**	
		2	31	3	..	..	**3**	**6**	
		3	39	8	..	..	**4**	**5**	
		4	51	9	..	..	**5**	**9**	

		5	61	6	..	..	**6**	**10**	
		6	90	0	..	..	**10**	**0**	
	Genacort (502 Genatosan)								
	lotion 0·25%	20 mils	39	0	..	..			TS
		32 mils	56	0	..	..			TS
	0·5%	20 mils	60	0	..	..			TS
	1·0%	20 mils	99	0	..	..			TS
	cream 0·5%	15 gm	54	0	..	..			TS
	1·0%	15 gm	81	0	..	..			TS
	ointment 0·5%	15 gm	54	0	..	..			TS
	1·0%	15 gm	81	0	..	..			TS
	Gevacolor (508 Gevaert)								
	roll films 120, 620, 127		..		..	..	**8**	**0**	
	35 mm film ..	..	..		..	..	**10**	**0**	
	Gillette (514 Gillette)								
	blue blades (5)	..	23	4	5	10	**2**	**0**	
			(20 pkts)						
	(10)	..	22	4	5	7	**3**	**10**	
			(10 pkts)						
	Glo-ahead (1188 Steiner)								
	hair colouriser	..	..		..	..	**4**	**6**	
	Gluco-juice (430 Eucryl)		30	3	..	..	**3**	**3**	
	Go (994 P&M)								
	roll-on deodorant	..	27	0	13	6	**4**	**8**	
Delete	Goya (532 Goya) soap bath guest flower								
	G.T. 50A (503G) ampoules								
		5 mils × 5	14	2ea	3	6½ea	**24**	**9½**	s1
	B	5 mils × 5	14	2ea	3	6½ea	**24**	**9½**	s1
	Hale (761 Lilia-White)								
	antiseptic disinfectant		14	10	..	..	**2**	**0**	
	Harkers (571 Stagg)								
	disposable enema	..	24	0 ..	6	0	**3**	**2**	
*	**Harmony** (955 Pepsodent)		15	4	7	3½	**2**	**6**	
	Heparin B.P. (930 P&B)								
	injection vial	1,000 i.u./ml.	42	0	..	..	**5**	**3**	
		5,000 i.u./ml.	150	0	..	..	**18**	**9**	
		25,000 i.u./ml.	672	0	..	..	**84**	**0**	
	He-Tan (451 F&J)								
	sun tan lotion ..	..	105	0	52	6	**17**	**6**	
	Hi-Shine (116 Benton)								
	hair conditioner	..	39	0	19	6	**6**	**6**	
	Hormofemin (830 Medo)								
	tablets 0·1 mgm	.. 100	14	0	..	..	**1**	**9**	
		250	24	0	..	..	**3**	**0**	
		500	36	0	..	..	**4**	**6**	
		1000	60	0	..	..	**7**	**6**	
	0·3 mgm	.. 100	18	0	..	..	**2**	**3**	
		250	32	0	..	..	**4**	**0**	
		500	52	0	..	..	**6**	**6**	
		1000	90	0	..	..	**11**	**3**	
	1·0 mgm	.. 100	22	0	..	..	**2**	**9**	
		250	46	0	..	..	**5**	**9**	
		500	78	0	..	..	**9**	**9**	
		1000	144	0	..	..	**18**	**0**	
	5·0 mgm	.. 100	44	0	..	..	**5**	**6**	
		250	100	0	..	..	**12**	**6**	
		500	186	0	..	..	**23**	**3**	
	compound tablets	.. 50	40	0	..	..	**5**	**0**	p1s1s4A
		100	76	0	..	..	**9**	**6**	p1s1s4A
		250	168	0	..	..	**21**	**0**	p1s1s4A
		500	312	0	..	..	**39**	**0**	p1s1s4A
		1000	600	0	..	..	**75**	**0**	p1s1s4A
	cream	.. 1 oz	40	0	..	..	**5**	**0**	
*	**Humatin** (938 PD)								
	capsules 250 mgm	.. 16	40	0ea		..	**60**	**0**	
	Hydro-Adreson (917 Organon)								
	skin lotion 0·5%	20 mils	5	0ea		..			TS
	1·0%	20 mils	8	3ea		..			TS
	skin ointment 0.5%	15 gm	4	6ea		..			TS
		50 gm	11	6ea		..			TS
	1·0%	15 gm	6	9ea		..			TS
		50 gm	18	9ea		..			TS
	2·5%	5 gm	6	0ea		..			TS
		15 gm	14	3ea		..			TS
		50 gm	43	6ea		..			TS
	intra-articular injection 25 mg/mil ..	5 mil	6	0ea		..			TS
	Hydrocortisone (917 Organon) Ointment ..								
	0·5%	15 gm	4	6ea		..			TS
	1·0%	15 gm	6	9ea		..			TS
		50 gm	18	9ea		..			TS
	2·5%	5 gm	6	0ea		..			TS
		15 gm	14	3ea		..			TS
	Hydrocortisone (1306 WCL)								
	cream non-greasy ½%	5 gm	2	0ea		..			TS
		15 gm	4	4ea		..			TS
	1%	5 gm	3	2ea		..			TS
		15 gm	6	6ea		..			TS
	2½%	5 gm	5	10ea		..			TS
		15 gm	13	8ea		..			TS
	lotion ½% ..	20 mils	4	10ea		..			TS
	1% ..	20 mils	8	0ea		..			TS
	ointment greasy ½%	5 gm	2	0ea		..			TS
		15 gm	4	4ea		..			TS
	1%	5 gm	3	2ea		..			TS
		15 gm	6	6ea		..			TS
	2½%	5 gm	5	10ea		..			TS
		15 gm	13	8ea		..			TS
		50 gm	42	6ea		..			TS
	Hydrocortistab (147 Boots)								
	cream 0·5% ..	5 gm	24	0	..	..	**2**	**8**	TS
		15 gm	54	0	..	..	**6**	**0**	TS
	1% ..	5 gm	39	0	..	..	**4**	**4**	TS
		15 gm	81	0	..	..	**9**	**0**	TS
	2·5% ..	5 gm	72	0	..	..	**8**	**0**	TS
		15 gm	171	0	..	..	**19**	**0**	TS
	injection vial 25 mgm/mil	5 mils	72	0	..	..	**8**	**0**	TS

	lotion 0·25% ..	20 mils	39	0	..	..	**4**	**4**	TS
	0·5% ..	20 mils	60	0	..	..	**6**	**8**	TS
	1% ..	20 mils	99	0	..	..	**11**	**0**	TS
	ointment 0·5%	5 gm	24	0	..	..	**2**	**8**	TS
		15 gm	54	0	..	..	**6**	**0**	TS
	1% ..	5 gm	39	0	..	..	**4**	**4**	TS
		15 gm	81	0	..	..	**9**	**0**	TS
	2·5%	5 gm	72	0	..	..	**8**	**0**	TS
		15 gm	171	0	..	..	**19**	**0**	TS
	tablets 20 mgm	.. 100	828	0	..	..	**92**	**0**	TS
	Hydrocortisyl (1087 Roussel)								
	tablets 10 mgm	.. 25	120	0	..	..	**15**	**0**	TS
	20 mgm	.. 25	240	0	..	..	**30**	**0**	TS
	injection 25 mgm/mil	1 mil	24	0	..	..	**3**	**0**	TS
		5 mils	72	0	..	..	**9**	**0**	TS
	skin lotion 0·5%	20 mils	60	0	..	..	**7**	**6**	TS
	1%	20 mils	99	0	..	..	**12**	**4½**	TS
	skin cream 0·5%	15 gm	54	0	..	..	**6**	**9**	TS
	1%	15 gm	81	0	..	..	**10**	**1½**	TS
		50 gm	225	0	..	..	**28**	**1½**	TS
	2·5%	5 gm	72	0	..	..	**9**	**0**	TS
		15 gm	171	0	..	..	**21**	**4½**	TS
		50 gm	522	0	..	..	**65**	**3**	TS
	Hydrocortone (887 MSD)								
	tablets 10 mgm	.. 25	10	0ea		..			TS
		100	38	0ea		..			TS
	20 mgm	.. 25	20	0ea		..			TS
		100	69	0ea		..			TS
	topical ointment 0·5%	15 gm	4	6ea		..			TS
		50 gm	11	6ea		..			TS
	1%	15 gm	6	9ea		..			TS
		50 gm	18	9ea		..			TS
	2·5%	5 gm	6	0ea		..			TS
		15 gm	14	3ea		..			TS
		50 gm	43	6ea		..			TS
	lotion 0·5% ..	20 mil	5	0ea		..			TS
		120 mil	25	0ea		..			TS
	1% ..	20 mil	8	3ea		..			TS
		120 mil	44	0ea		..			TS
	njection saline suspension								
		1 mil × 6	8	3ea		..			TS
		5 mil	6	0ea		..			TS
	Hydromycin D (147 Boots)								
	ointment ..	5 gm	4	9ea		..	**6**	**4**	TS
		15 gm	12	3ea		..	**16**	**4**	TS
	lotion	15 mils	12	9ea		..	**17**	**0**	TS
	ear/eye drops ..	3 mils	4	9ea		..	**6**	**4**	TS
	Hydro Saluric K (837 MSD)								
	tablets	.. 25	8	8ea		..	**13**	**0**	
		100	32	8ea		..	**49**	**0**	
		500	160	0ea		..	**240**	**0**	
	Hydrothide (830 Medo)	.. 100	32	8ea		..	**49**	**0**	
	Hygroton (501 Geigy)								
	tablets 100 mgm	.. 15	9	7ea	2	4⅜ea			
		100	57	2ea	14	3½ea			
		500	280	0ea	70	0ea			
	Hypertensin (262 Ciba)								
	ampoules 0·5mgm/2 mils	.. 6	16	0ea	4	0ea			
Delete	Hypertane (830 Medo)								
	tablets	.. 500							
		1000							
	compound tablets	.. 500							
		1000							
	Ilfachrome (645 Ilford) 35 mm colour film								
	20 exposure cassette ..		177	1	20	0	**22**	**9**	
	36 exposure ..	..	265	4	30	0	**34**	**1**	
Delete	Ilford (645 Ilford) 35 mm colour film D								
	20 exposure ..	..	..		..	..			
	36 exposure ..	..	..		..	..			
Delete	Incidal (452 FBA)	.. 10							
		250							
	Inco-Pads (1073 Robinson)		60	0	..	..	**6**	**11**	
	Inecto (1028 Rapidol)								
	colour-cream ..	..	40	0	20	0	**6**	**8**	
	Innoxa (654 Innoxa)								
	Mermaid Pink lipstick		..		..	..	**5**	**0**	
	Fire Coral ..	..	..		..	..	**5**	**0**	
		twin pack	..		..	..	**9**	**6**	
	Intimate (1052 Revlon)								
	eau de toilet 0984	.. 2 oz	..		..	..	**15**	**6**	
	0985	.. 4 oz	..		..	..	**27**	**6**	
	spray mist 0900	.. 4 oz	..		..	..	**32**	**6**	
	Intralgin (1061 Riker)								
	liquid	.. 8 oz	80	0	20	0	**11**	**8**	
		32 oz	236	0	59	0	**34**	**5**	
	gel	50 gm	40	0	10	0	**5**	**10**	
	Intrathecal (518 Glaxo)								
	ampoules 5 mils	.. 3	9	0ea		..	**13**	**6**	TS
	Intraval (814 M&B) sodium								
	suppositories 125 mgm	5	50	0	..	..	**6**	**3**	p1s1s4A
	250 mgm	5	60	0	..	..	**7**	**6**	p1s1s4A
	500 mgm	5	80	0	..	..	**10**	**0**	p1s1s4A
	Ismelin (262 Ciba)								
	tablets 10 mgm	.. 25	8	8ea	2	2ea	**15**	**2**	
		100	32	4ea	8	1ea	**56**	**7**	
		500	157	4ea	39	4ea	**275**	**4**	
	25 mgm	.. 25	20	0ea	5	0ea	**35**	**0**	
		100	76	4ea	19	1ea	**133**	**7**	
		500	376	8ea	94	2ea	**659**	**2**	
*	**Jadit** (614 Hoechst) (distributors 621 Horlicks)								
	ointment ..	20 gm	28	0	6	10	**4**	**1**	
	solution ..	30 mils	52	0	12	8	**7**	**7**	
	powder	40 gm	52	0	12	8	**7**	**7**	
*	**Jadit 'H'** (614 Hoechst) (distributors 621 Horlicks)								
	ointment ..	5 gm	70	0	17	1	**10**	**2**	TS
	solution ..	6 mils	96	0	23	5	**13**	**11½**	TS
	Jean Sorelle (669 Sorelle)								
	bath salt tablets	SO1	17	6	8	6	**2**	**11**	
	new grapes bath tablets	SO6	41	6	20	3	**6**	**11**	

Delete	penguin bubble bath	SO46	..		..	..			
Delete	boutique ..	SO43	..		..	..			
Delete	grapes on platform	SO7C	..		..	..			
Delete	presentation box	SO33	..		..	..			
	Jertox (1232 T&R)								
	aerosol insecticide ..		31	6	..	..	**3**	**9**	
	Jeyes' (671 Jeyes) fluid	16 oz	22	6	..	..	**2**	**6**	
	K2r (890 NC&C)								
	spot lifter		28	0	..	..	**3**	**6**	
Delete	Keith's (787 Macfarlan)								
	ether anaesthetic	250 mils	..		..	..			
		500 mils	..		..	..			
	Kill Cold (1388 Durazone)		..		..	..	**4**	**6**	
	Kirby's (705 Kirby)								
	iron and yeast tonic								
	tablets	80	18	6	4	7½	**3**	**0**	
	Kisby (1067 Roberts)								
	dry shampoo powder ..		21	0	5	3	**2**	**9**	
			50	0	12	6	**6**	**8**	
*	**Kleinerts** (706 Kleinerts) baby pants								
	Frolic 2183		40	0	..	..	**4**	**11**	
	extra large		44	0	..	..	**5**	**6**	
A	**Kolynos** (655 ICC)								
	super white dental cream		13	10	3	6	**1**	**10**	
	denture powder		13	3	3	4	**1**	**9**	
			20	8	5	2	**2**	**9**	
	Larola (105 Beetham)								
	skin lotion	2 oz	15	0	7	6	**2**	**6**	
		3 oz	21	0	10	6	**3**	**6**	
		6 oz	33	0	16	6	**5**	**6**	
	Ledermycin (746 Lederle)								
	capsules 150 mgm ..	16	29	0ea		..	**43**	**6**	
		100	174	2ea		..	**261**	**3**	
		1,000	1,682	4ea		..	**2,523**	**6**	
	Leptovax-Plus (208 BW)								
	(vet)	1 mil × 2	74	3	..	..	**8**	**3**	TS
	Lignocaine (787 Macfarlan)								
	dental cartridges 2 mils 2%								
		100	30	2ea		..	**37**	**9**	
	Lignocaine (787 Macfarlan)								
	hydrochloride solution								
	25 mils 4%		50	0	..	..	**6**	**3**	
Delete	Lignocaine (787 Macfarlan)								
	neothyl ..	100 gm	4	0ea		..			
		500 gm	16	0ea		..			
	Linct. Pholcodin. Co.								
	(579 Hatrick)	16 oz	90	0	..	..			
		80 oz	420	0	..	..			
	Liquid Satin (654 Innoxa)								
	satin blush		..		..	..	**6**	**9**	
	Little Laxaliver (372 De Witt)								
	pills		13	6	3	4	**1**	**9**	
	Living Curl (1052 Revlon)	7 oz	..		..	..	**12**	**6**	
*	**Lysinex** (769 LloydHamol)								
	tablets	25	12	0ea		..	**18**	**0**	
		100	38	0ea		..	**57**	**0**	
A	**Lystone** (655 ICC) salts ..		22	8	5	8	**3**	**0**	
	Marplan (1074 Roche)								
	tablets 10 mgm ..	50	8	4ea	2	1ea	**14**	**7**	
		250	31	8ea	7	11ea	**55**	**5**	
	Mathaplast (1307 Waterhouse)								
	antiseptic spray bandage		49	0	..	..	**5**	**6**	
	Max (855 Mondart)								
	air freshener ..	8 oz	49	6	..	..	**5**	**6**	
	moth proofer ..	8 oz	49	6	..	..	**5**	**6**	
	fly killer ..	8 oz	49	6	..	..	**5**	**6**	
*	**Max Factor** (813 MF)								
	hand cream tube ..		18	0	9	0	**3**	**0**	
	roll-on deodorant ..		26	0	17	0	**5**	**9**	
	Medac (502 Genatosan)	tube	20	0	10	0	**3**	**6**	
Delete	Medicel (938 PD)								
	suspension ..	16 oz	85	0ea		..			
	Medihaler Cort (1061 Riker)		440	0	..	..	**55**	**0**	
	refill		412	0	..	..	**51**	**6**	
	plastic mouthpiece ..		28	0	..	..	**3**	**6**	
	Medihaler Epi (1061 Riker)		152	0	..	..	**19**	**0**	
	refill		124	0	..	..	**15**	**6**	
	plastic mouthpiece ..		28	0	..	..	**3**	**6**	
	Medihaler Iso (1061 Riker)		152	0	..	..	**19**	**0**	
	refill		124	0	..	..	**15**	**6**	
	forte		176	0	..	..	**22**	**0**	
	refill		148	0	..	..	**18**	**6**	
	plastic mouthpiece ..		28	0	..	..	**3**	**6**	
	Meggeson (831 Meggeson)								
	mixed fruit pastilles								
	"Hurdler" box ..		13	6	..	..	**1**	**6**	
	Melleril (1098 Sandoz)								
	tablets 10 mgm ..	50	40	0	10	0	**5**	**10**	
		250	180	0	45	0	**26**	**3**	
	25 mgm ..	50	66	0	16	6	**9**	**8**	
		250	300	0	75	0	**43**	**9**	
	50 mgm ..	50	126	0	31	6	**18**	**5**	
		250	570	0	142	6	**83**	**2**	
	100 mgm ..	50	240	0	60	0	**35**	**0**	
		250	1080	0	270	0	**157**	**6**	
	Mephyton (837 MSD)								
	emulsion 10 mgm per ml								
		1 mil 6	30	0ea		..			
	Midicel (938 PD)								
	suspension ..	16 oz	85	0ea		..			
	Mix-A-Shake (621 Horlicks)		gross						
	pkt. ..	1 oz	57	7	..	..		**6**	
	Mixtamycin (378 TDC)								
	solution (vet) ..	90 mils	29	4ea		..	**44**	**0**	TS
	Morphy-Richards (863 MR)								
	electric shaver ..		..	..	10	9ea	**70**	**0**	
	Mothak (1229 T&C)								
	fly spray aerosol ..	5 oz	33	9	..	..	**3**	**9**	
		10 oz	54	10	..	..	**6**	**3**	
	moth proofer ..	5 oz	33	9	..	..	**3**	**9**	
	Movol (406 WE) ..		12	0	..	..	**1**	**6**	p2
	Muguet des Bois (301 Coty)								
	Cotymist aerosol spray		185	0	92	6	**32**	**6**	
	talc lightweight bottle		43	0	21	6	**7**	**6**	
	bath salts lightweight bottle		61	0	30	6	**10**	**6**	
	Multivite (179 BDH)								
	pellets	150	74	0	..	..	**9**	**3**	
	Mycil (179 BDH)								
	powder		18	0	..	..	**2**	**3**	
	Mycota (147 Boots)								
	powder ..	2½ oz	18	0	..	..	**2**	**3**	
	Nail Dry (797 MSG) ..		75	0	37	6	**12**	**6**	
	Narphen (1154 S&N) ampoules								
	2 mgm/mil	10	15	0ea	3	9ea	**26**	**3**	DD
		100	120	0ea	30	0ea	**210**	**0**	DD
	Nebadrene (930 P&B)								
	nebuliser		9	2	..	..	**13**	**9**	
	Neobacrin (518 Glaxo)								
	ointment 3·5 mgm ..		18	0	..	..	**2**	**0**	TS
	15 gm ..		42	0	..	..	**4**	**8**	TS
	Neothyl (787 Macfarlan)								
		100 gm	4	0ea		..			
		500 gm	16	0ea		..			
	Neumandin (147 Boots)								
	tablets, 50 mgm ..	100	23	0	..	..	**2**	**10¼**	
		1000	138	0	..	..	**17**	**3**	
	Neutrapen (208BW)	vial	360	0	..	..	**45**	**0**	
	Nitoman (1074 Roche)								
	tablets 25 mgm ..	30	6	8ea	1	8ea	**11**	**8**	
		150	26	8ea	6	8ea	**46**	**8**	
		500	66	8ea	16	8ea	**116**	**8**	
Delete	Noctynol (859 Moore)								
	tablets	12	..		..	..			
		dp 50	..		..	..			
		dp 250	..		..	..			
	Noradran (897 NC) Bitabs								
		50 doses	84	0	..	..	**10**	**6**	p1
		250 doses	368	0	..	..	**46**	**0**	p1
	Bitabs nocte ..	20 doses	48	0	..	..	**6**	**0**	p1s1s4 A
		100 doses	210	0	..	..	**26**	**3**	p1s1s4 A
	inhaler		96	0	..	..	**12**	**0**	
	Norflex (1061 Riker)								
	tablets	100	20	8ea		..	**31**	**0**	
		500	93	0ea		..	**139**	**6**	
	Nuit de Longchamp (Lubin) (1 Abbey)								
	parfum de toilette ..	1 oz	..		..	..	**17**	**6**	
		2 oz	..		..	..	**30**	**0**	
		4 oz	..		..	..	**45**	**0**	
	Nu-seals (413 Lilly)								
	ferrous sulphate gr 5	dp 100	38	0	..	..	**4**	**9**	
		dp 1000	256	0	..	..	**32**	**0**	
		dp 5000	1220	0	..	..	**152**	**6**	
Delete	Nutinal (147 Boots)								
	tablets 1 mgm ..	100	..		..	..			
		500	..		..	..			
	Old Spice (1131 Shulton)								
	brushless shaving cream		23	0	5	7	**3**	**6**	
	Omnivite (1285 Vitamins)								
	forte tablets	100	15	0ea		..	**22**	**6**	
	Opilon (1278 Veritas)								
	tablets, 5 mgm ..	50	5	3ea		..			
		200	16	4ea		..			
Delete	Page Barker (261 Christy)								
	scurf lotion								
	Paracodin (708 Knoll)								
	drops	15 mils	36	0	9	0	**4**	**9**	
		100 mils	204	0	51	0	**26**	**11**	
	Parador (1229 T&C)								
	air freshener aerosol ..	5 oz	33	9	..	..	**3**	**9**	
	floral disinfectant ..		21	0	..	..	**2**	**6**	
*	**Pasinah-302** (1303 Wander)								
		180	41	0ea		..	**61**	**6**	TS
	Paskalium (521 Glenwood)	1 lb	50	1½ea		..	**67**	**6**	
		1 kilo	111	4½ea		..	**148**	**6**	
	tablets	1000	60	0ea		..	**80**	**0**	
	Paxette (884 NB)								
	electromatic camera ..		..		..	..	**525**	**0**	
	super camera I/L ..		..		..	..	**532**	**6**	
	Paxina (884 NB)								
	electromatic camera ..		..		..	..	**525**	**0**	
R	**Payot Dr** (870 MV)								
	deodorant	856.71	6	5½ea	2	11½ea	**12**	**4**	
	Pectamol (179 BDH)								
	linctus	2 litres	590	0	..	..			
	Penbenemid (837 MSD)								
	suspension	2 oz	78	0	..	..	**9**	**9**	
	tablets	12	93	0	..	..	**11**	**7½**	
	Penicillin V-K (147 Boots)								
	tablets 125 mgm ..	100	36	6ea		..	**54**	**9**	TS
		500	172	6ea		..	**258**	**9**	TS
	250 mgm ..	100	72	0ea		..	**108**	**0**	TS
		500	343	0ea		..	**514**	**6**	TS
	Penotrane (1305 WB)								
	silicone cream ..	60 gm	5	0ea	1	3ea	**8**	**9**	
		200 gm	12	0ea	3	0ea	**21**	**0**	
		500 gm	25	0ea	6	3ea	**43**	**9**	
	Pentoxylon (1061 Riker)								
	tablets	25	36	0	..	..	**4**	**6**	
		100	120	0	..	..	**15**	**0**	
		500	528	0	..	..	**66**	**0**	
	Pepsodent (955 Pepsodent)								
	tooth paste		13	9	3	3	**1**	**10**	
			20	1½	4	9½	**2**	**8**	
	Persomnia (70 Aspro) ..	12	17	10	4	5½	**2**	**6**	
		27	35	8	8	11	**5**	**0**	
	Pethidine (394 Duncan)								
	hydrochloride tablets								
	50 mgm	100	78	0	..	..	**9**	**9**	DD
		500	346	0	..	..	**43**	**3**	DD
	Phenergan (814 M&B)								
	tablets 10 mgm ..	25	20	0	..	..	**2**	**6**	p1s7
		500	340	0	..	..	**42**	**6**	p1s7

	25 mgm	25	32	0	..	..	4	0	pls7
		500	520	0	..	..	65	0	pls7
	elixir	40 oz	220	0	..	..	27	6	pls7
	ampoules 2 mils	10	76	0	..	..	9	6	pls7
	cream	1 lb	260	0	..	..	32	6	
	Phillips (976 Phillips)								
	toothpaste		20	2	5	0¼	2	8	
Delete	Pholtex.								
	Pholcomed (830 Medo)								
	pastilles	30	36	0	..	..	4	6	pl
		250	240	0	..	..	30	0	pl
*	**Pinaud** (128 Biometica)								
	after-shave lotion		42	0	21	0	7	0	
	pre-electric shave lotion		50	0	25	0	8	4	
	deodorant cologne		60	0	30	0	10	0	
	tonic hair lotion		50	0	25	0	8	4	
	shampoo		40	0	10	0	5	10	
	lather shaving cream		26	3	6	7	3	10	
	Lilac Vegetal	8 oz	50	0	25	0	8	4	
A	**Pineate** (655 ICC)								
	honey cough syrup		20	8	5	2	2	9	
	Pituitary (61 APC)								
	posterior lobe snuff capsules								
		25	7	11ea		..	11	10	
		100	28	3ea		..	42	4	
		500	133	6ea		..	200	3	
	Plantoid (1396 Plantoid)								
	automatic injector	–	..	..		..	18	9	
	Pleniron (695 TK) tablets	100	4	2ea		..			
		1000	38	0ea		..			
A	**Plesmet** (276 C&C)								
	tablets	1000	240	0	..	..	30	0	
	Pomp (365 Demuth)								
	(distributors 261 Christy)								
	moth proofer aerosol	12 oz	58	6	..	..	6	6	
	fly killer aerosol	16 oz	81	0	..	..	9	0	
	Precortisyl (1087 Roussel)								
	tablets 1 mgm	100	108	0	..	..	13	6	TS
		500	432	0	..	..	54	0	TS
	5 mgm	30	132	0	..	..	16	6	TS
		100	390	0	..	..	48	9	TS
		500	1860	0	..	..	232	6	TS
	injection 25 mgm/mil	1 mil	60	0	..	..	7	6	TS
		5 mil	276	0	..	..	34	6	TS
	Predasin (518 Glaxo)								
	tablets	50	4	3ea		..	5	8	TS
		500	31	6ea		..	42	0	TS
	Prednelan (518 Glaxo)								
	tablets 1 mgm	100	9	0ea		..	12	0	TS
		500	36	0ea		..	48	0	TS
	5 mgm	30	11	0ea		..	14	8	TS
		100	32	6ea		..	43	4	TS
		500	155	0ea		..	206	8	TS
	Prednelan-N (518 Glaxo)								
	intra-articular injection								
		1 mil × 6	30	0ea		..	40	0	TS
		5 mils	23	0ea		..	30	8	TS
	Prednisolone (938 PD)								
	tablets 1 mgm	25	36	0	..	..	4	6	TS
		100	108	0	..	..	13	6	TS
		500	432	0	..	..	54	0	TS
	5 mgm	25	110	0	..	..	13	9	TS
		100	390	0	..	..	48	9	TS
		500	1860	0	..	..	232	6	TS
	Prednisolone (837 MSD)								
	tablets 1 mgm	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm	100	32	6ea		..			TS
		500	155	0ea		..			TS
	Prednisolone (1306 WCL)								
	tablets 1 mgm	30	2	8ea		..			TS
		100	8	9ea		..			TS
		500	35	2ea		..			TS
	5 mgm	30	10	9ea		..			TS
		100	31	8ea		..			TS
		500	151	2ea		..			TS
	buffered tablets 5 mgm	30	10	9ea		..			TS
		100	31	8ea		..			TS
		500	151	2ea		..			TS
	Prednisone (1306 WCL)								
	tablets 1 mgm	30	2	8ea		..			TS
		100	8	9ea		..			TS
		500	35	2ea		..			TS
	5 mgm	30	10	9ea		..			TS
		100	31	8ea		..			TS
		500	151	2ea		..			TS
	buffered tablets 5 mgm	30	10	9ea		..			TS
		100	31	8ea		..			TS
		500	151	2ea		..			TS
	Prednisone (147 Boots)								
	tablets 1 mgm	30	2	9ea		..	3	8	TS
		100	9	0ea		..	12	0	TS
		500	36	0ea		..	48	0	TS
	5 mgm	30	11	0ea		..	14	8	TS
		100	32	6ea		..	43	4	TS
		500	155	0ea		..	206	8	TS
	Prednisone (938 PD)								
	tablets 1 mgm	25	36	0	..	..	4	6	TS
		100	108	0	..	..	13	6	TS
		500	432	0	..	..	54	0	TS
	5 mgm	25	110	0	..	..	13	9	TS
		100	390	0	..	..	48	9	TS
		500	1860	0	..	..	232	6	TS
	Prednisone (969 Pfizer)								
	tablets 1 mgm	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Prednisone (147 Boots)								
	tablets 1 mgm	100	9	0ea		..			TS
		500	36	0ea		..			TS
	5 mgm	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Prednisone (1263 Upjohn)								
	tablets 5 mgm	30	11	0ea		..			TS
		100	32	6ea		..			TS
		500	155	0ea		..			TS
	Predsol-N (518 Glaxo)								
	eye/ear drops	3 mils	4	9ea		..	6	4	TS
	lotion 0·1%	20 mils	5	0ea		..	6	8	TS
	0·25%	20 mils	8	9ea		..	11	8	TS
	ointment Nos. 1 & 2								
	0·25%	5 gm	3	0ea		..	4	0	TS
		15 gm	7	3ea		..	9	8	TS
	0·5%	5 gm	4	9ea		..	6	4	TS
		15 gm	12	3ea		..	16	4	TS
	Priatan (708 Knoll)								
	tablets	20	42	0	10	6	5	6½	
		200	28	0ea	7	0ea	44	3½	
	liquid	10 mils	36	0	9	0	4	9	
		100 mils	24	0ea	6	0ea	38	0	
	ampoules 1·1 mil	6	42	0	10	6	5	6½	
		30	180	0	45	0	23	9	
	Primodos (973 Pharmethicals)								
	tablets	2	5	0ea		..	7	6	
		20	42	6ea		..	63	9	
Delete	Primodos (973 Pharmethicals)								
	tablets	4	6	2ea		..	9	3	
		40	52	6ea		..	78	9	
	Profenil (324 Crookes)	25	32	0	..	..	4	0	
		100	112	0	..	..	14	0	
		250	256	0	..	..	32	0	
	Proladone (324 Crookes)								
	ampoules 1 mil	6	90	0	..	..	10	0	DDs1
		60	666	0	..	..	74	0	DDs1
	Protamyl (814 M&B)								
	tablets	50	44	0	..	..	5	6	pls1s4A
		500	32	6ea		..	48	9	pls1s4A
	Pulmodrine (830 Medo)								
	syrup	40 oz	20	0ea	5	0ea	35	0	s7
		80 oz	36	0ea	9	0ea	63	0	s7
	Puromyn (218 Calmic)								
	tablets	20	34	0	8	6	4	11½	TS
	Q-tips (1020 Q-tips)	100	8	0	..	..	1	0	
	Quatoral (549 Guest)		15	0	..	..	2	6	pl
	Queen (151 Boutalls)								
Insert	seaside cream		21	0 ..	10	6	3	6	
Delete	hand cream		21	0	10	6	3	6	
			36	0	18	0	6	0	
	Quelque Fleurs (Houbigant (1 Abbey))								
	perfume purse diffuseur		..		..	..	42	0	
	refill		..		..	..	27	6	
	Rapidal (830 Medo)	250	15	6ea		..	23	3	pls1s4A
	Rautrax (1176 Squibb)								
	tablets improved	25	9	10ea		..	14	9	
		100	37	4ea		..	56	0	
		500	169	4ea		..	254	0	
	Rauwiloid (1061 Riker)	60	112	0	..	..	14	0	
		500	768	0	..	..	96	0	
	and hexamethonium	100	252	0	..	..	34	0	pls1s4A
		500	1224	0	..	..	153	0	pls1s4A
	and **Veriloid**	100	488	0	..	..	61	0	
		500	2192	0	..	..	274	0	
	Regula (980 Photopia)								
	Olympia 1 camera		..		..	..	599	11	
	Retina (711K odak)								
	camera IB		..		..	..	813	9	
	IIC		..		..	..	1,046	3	
	IIIC		..		..	..	1,395	0	
	IIS		..		..	..	1,092	9	
	IIIS		..		..	..	1,371	9	
	reflex S		..		..	..	1,813	6	
	Retinette (711 Kodak)								
	camera IIA		..		..	..	651	0	
A	**Reudel** (655 ICC) bath salts		15	2	3	10	2	0	
	Revlon (1052 Revlon)								
	aquamarine fragrance	2 oz	..		..	..	12	6	
		4 oz	..		..	..	21	6	
	spray mist		..		..	..	29	6	
	Roberts Windsor (1070 Windsor)								
*	soap luxury size	1106	11	7	2	9	1	6	
A	bath disks	1103	14	9	3	6	1	11	
A	talcum powder	1115	17	3	8	2	2	9	
	Robinade (285 Colman)								
	sachet		14 gross	3	..	..		1½	
	Robinsons (285 Colman)								
	Sicilian lemon juice	25 oz	41	0	..	..	4	3	
	Roman Holiday (150 Bourjois)								
	cologne stick		..		..	..	5	6	
	Roter (444 FAIR) tablets	40	50	0	12	6	6	10	
		120	144	0	36	0	19	4	
		360	408	0	..	..			
		720	768	0	..	..			
	Rozalex (1088 Rozalex)								
	waterless skin cleanser	tube	22	6	..	..	2	6	
	stain removing cream	tube	31	6	..	..	3	6	
	Rubinstein (596 HR)								
	heart shaped lipstick		62	0	31	0	10	6	
	refill		38	0	19	0	6	6	
	Salupres (837 MSD)								
	tablets	100	20	0ea		..	30	0	
		500	90	0ea		.	135	0	
	Salutone (339 CG)	8 oz	24	0	6	0	3	9	
	Sandra (599 Henleys)								
	aprons		12	0ea	0	7ea	18	7	
	incontinence pants		7	0ea		..	10	6	
	supa-sheets		14	0ea		..	21	0	

	Sanipants (339 CG)								
	small or medium		59	6	2	11½	6	11	
	Sanoid (339 CG)								
	first aid outfit refill A137R		53	3ea		..			
	Sanoid (339 CG)								
	rigid zinc oxide plaster								
	½ in×1 yd		4	3	..	..		6	
	1 in×1 yd		5	3	..	..		7½	
	1 in×3½ yd		13	6	..	..	1	7	
	½ in×3½ yd		8	6	..	..	1	0	
	½ in×5 yd		12	6	..	..	1	5½	
	1 in×5 yd		19	0	..	..	2	3	
	2 in×5 yd		33	3	..	..	3	10	
	3 in×5 yd		47	0	..	..	5	6	
	4 in×5 yd		61	9	..	..	7	3	
	½ in×10 yd		20	9	..	..	2	4½	
	1 in×10 yd		32	0	..	..	3	9	
	2 in×10 yd		59	6	..	..	7	0	
	3 in×10 yd		83	3	..	..	9	9	
	4 in×10 yd		104	0	..	..	12	2	
	elastic zinc oxide								
	1 in×1 yd		11	3	..	..	1	4	
	2 in×1 yd		17	6	..	..	2	0½	
	1 in×3 yd		24	6	..	..	2	10½	
	2 in×3 yd		40	9	..	..	4	9	
	plastic baby pants								
	nylon covered med	D96	46	3	..	..	4	11	
	large		49	0	..	..	5	3	
	Satin Set (1052 Revlon)	7 oz	..		..	..	12	6	
	Scentinel (889 NH) Milkoola		16	0	2	0	2	0	
	Scentinel (889 NH)								
	Quiff aerosol		36	0	..	..	3	11	
	Wham aerosol		36	0	..	..	3	11	
	Secto (1123 Secto)								
	ant killer aerosol	5 oz	..		..	..	4	6	
	Silk Film (596 HR)		61	0	31	0	10	6	
	Skin Deep (76 Atkinson)								
	plain or tinted tube		19	7	9	7	3	3	
	jar		39	3	19	2	6	6	
	Skin Thin (774 LR)								
	rubber gloves		..		..	..	4	6	
	Slumba Roll (888 Newey)								
	⅞ in. hair roller		8	4 ..	2	1	1	3	
							card		
	Sodium Versenate (1061 Riker)								
	ampoules 5 mils	6	336	0	..	..	42	0	
	Sonergan (814 M&B)								
	tablets	50	60	0	..	..	7	6	p1s1s4A
		500	46	8ea		..	70	0	p1s1s4A
	Sooty (331 C of C)								
	shampoo sachets		5	0	1	3		9	
	Soventol (708 Knoll)								
	tablets	20	36	0	9	0	4	9	
		200	25	6ea	6	4½ea	40	4½	
	jelly	20 gm	30	0	7	6	3	11½	
	Soventol C (708 Knoll)								
	dragees	20	36	0	9	0	4	9	
		200	25	6ea	6	4½ea	40	4½	
	Spa Brushes (1167 Spa)								
	"Dome Cut"								
	streamline with tail-comb	827	36	0	9	0	5	3	
	featherweight styling	820	24	0	6	0	3	8	
	"luxury" ladies hair-brush ebony	2106	..		..	..	43	6	
	rosewood		..		..	..	27	0	
	"Guardsman" military brush set	806P	..		..	..	17	0	
	Sparklets (1168 Sparklet) syphons								
	streamline model		792	0	96	6	96	0	
	Hostmaster model		565	0	69	0	68	8	
	" C" bulbs	10	49	6	..	..	5	6	
	HC3 dental sprays		78	0ea	22	10ea	120	4	
	(on prescription)		78	0ea		..	97	6	
	Sprayclean (1388 Durazone)								
	spot remover		..		..	..	3	3	
	Spree (955 Pepsodent)								
	fruit squash sachet		39	0	..	..		4	
			gross						
	Springtime in Paris (150 Bourjois)								
	presentation perfume		..		..	..	17	8	
	purse flacon		..		..	..	7	6	
	spray mist		..		..	..	15	6	
	cologne stick		..		..	..	5	0	
	bath cubes	6	..		..	..	3	6	
	talc		..		..	..	4	6	
	soap	3	..		..	..	3	9	
	Stein (1395 Purser)								
	self-illuminating microscope		88	4ea		..	132	6	
	Steiner (1188 Steiner)								
	"pearl foam" shampoo								
	packet		..		..	..		10	
	bottle		..		..	..	3	9	
	Stimplete (1352 Wyeth)								
	elixir	4 oz	48	0	..	..	5	4	s1s4A
		40 oz	32	6ea		..	43	4	s1s4A
	Streptaquaine (378 TDC)								
	5·0 gm/15 mils	single	6	0ea		..	9	0	TS
	1·0 gm/4 mils	5	7	6ea		..	11	3	TS
	5·0 gm/20 mils	single	6	0ea		..	9	0	TS
Delete	Stresscaps (746 Lederle)	30	..		..	..			
Delete	Strix (589 Moore)								
	tablets	dp 500	..		..	..			
	Suba-Seal (479 WF) hot water bottles								
	No. 3 standard with handle		60	0	..	..	7	6	
	streamline		68	0	..	..	8	6	
	comet		63	4	..	..	7	11	
	gaywarm		68	0	..	..	8	6	
	Suba-Flora perfumed		71	0	..	..	8	11	
	screw-type No. 3 warmline		68	0	..	..	8	8	
	pennant		55	4	..	..	8	11	
	children's bear cub and dog toby		63	4	..	..	7	11	
	father bear		68	0	..	..	8	6	
	Submarine (555 Haffenden)								
	hot water bottles								
	slumbersound	No. 2	..		..	..	5	3	
		No. 3	..		..	..	5	9	
	slumberdeep	No. 2	..		..	..	5	3	
		No. 3	..		..	..	5	9	
	solafin	No. 3	..		..	..	6	6	
	warmwave	No. 3	..		..	..	6	6	
	safetyglow	No. 3	..		..	..	8	9	
	safetyray	No. 3	..		..	..	8	9	
*	**Surfadil** (413 Lilly)								
	cream	28 gm	36	0	..	..	4	6	
	Sylvia (339 CG)								
	sanitary towels, size 0	(12)	19	6	..	..	2	1	
	1	(12)	20	9	..	..	2	3	
	1	(6)	10	6	..	..	1	2	
	2	(12)	24	6	..	..	2	8	
	3	(12)	30	6	..	..	3	4	
	maternity	(12)	35	9	..	..	4	0	
	Sympatol (757 Lewis)								
	liquid 10%	20 mils	60	0	..	..	6	8	
		100 mils	270	0	..	..	30	0	
	ampoules 1 mil	6	40	6	..	..	4	6	
		36	146	3	..	..	16	3	
	Synuson (657 IL)								
	tablets	50	56	0	14	0	8	2	S7
Delete	Tablold (208 BW) benzyl-penicillin								
	10,000 iu (hypodermic) No. 172	10	..		..	..			
	Terpacol (195 Brook Parker)								
		4 oz	3	4ea					
		8 oz	5	10ea					
Delete	Tetride (859 Moore) tablets	16	..		..	..			
		50	..		..	..			
		dp 500	..		..	..			
	Tetritol (436 Evans)								
		250 mils	6	8ea	1	8ea	11	8	
	The Camellia (462 Field)								
	talcum		..		..	..	2	10	
	perfume stick		..		..	..	3	9	
	bathcubes	6	..		..	..	3	0	
	soap	3	..		..	..	3	6	
	Theodrox (1061 Riker)								
	tablets	25	32	0	8	0	4	8	
		100	80	0	..	..			
		1000	600	0	..	..			
	with phenobarbitone	25	36	0	9	0	5	3	p1s1s4A
		100	84	0	..	..			p1s1s4A
		1000	628	0	..	..			p1s1s4A
	Therapas (1154 S&N) code correction								
	Three Flasks (1232 T&R)								
	children's cherry cough syrup	2½ oz	12	4	3	1	2	0	
	Thrombotest (436 Evans)								
	ampoules, small pack		45	0ea		..			
	large		150	0ea		..			
	Tonivitan (830 Medo)								
	capsules	1000	60	0ea		..	90	0	
	Trescatyl (814 M&B)								
	tablets 250 mgm	250	210	0ea	52	6ea	367	6	
	Triominic (1303 Wander)								
	tablets	50	101	8	25	5	14	10	
		250	36	5ea	9	1ea	63	8	
	Trust (671 Jeyes) toilet roll		..		..	..	1	4	
*	**Tumeson** (614 Hoechst)								
	(distributors 621 Horlicks)								
	ointment	5 gm	40	0	9	9	5	10	
		20 gm	128	0	31	2	18	7	
	Tussinf (195 Brook Parker)								
		4 oz	2	1ea					
		8 oz	3	3ea					
	Ultima (1052 Revlon)	1 oz	..		..	..	14	6	
		2 oz	..		..	..	52	6	
		4 oz	..		..	..	84	0	
	Ultracorten (262 CIBA)								
	tablets 1 mgm	25	34	0	..	..	4	3	TS
		100	108	0	..	..	13	6	TS
		500	36	0ea		..	54	0	TS
	5 mgm	25	110	0	..	..	13	9	TS
		100	32	6ea		..	48	9	TS
		500	155	0ea		..	232	6	TS
	Ultracerten H (262 CIBA)								
	tablets 1 mgm	25	34	0	..	..	4	3	TS
		100	108	0	..	..	13	6	TS
		500	36	0ea		..	54	0	TS
	5 mgm	25	110	0	..	..	13	9	TS
		100	32	6ea		..	48	9	TS
		500	155	0ea		..	232	6	TS
	Unic (581 Haynor)								
	battery shaver		36	3ea	8	10ea	58	10	
	Vaccination Pads (1295 Wade)		3	8	..	..		5½	
	Valet (365 Demuth)								
	(distributors 261 Christy)								
	dry cleaner		22	6	..	..	2	6	
	Valgraine (378 DCBL)								
	tablets	12	55	0	..	..	6	10½	s1
		100	33	9ea		..	50	7½	s1
	Valoid (208 BW)								
	tablets 50 mgm	100	180	0	..	..	20	0	
*	**Valtorin** (969 Pfizer) tablets	6	16	0	4	0	2	4	
		12	30	0	7	6	4	4½	
		dp 100	15	0ea	3	9ea	26	3	
		dp 300	40	0ea	10	0ea	70	0	
	Vandid (1061 Riker) ampoules								
	5%	2 mils 6	13	0ea		..	19	6	
		5 mils 6	18	0ea		..	27	0	

Vapules (1367 R&B)								
	dp 12×10	12	0ea		..			
Variban (339 CG)								
elastic adhesive bandage								
BPC/NHS	2 in×3 yd	40	9	..	..	**4**	**9**	
	2½ in×3 yd	49	9	..	..	**5**	**10**	
	3 in×3 yd	58	9	..	..	**6**	**10½**	
	4 in×3 yd	76	9	..	..	**9**	**0**	
NHS	2 in×3 yd	38	6	..	..	**4**	**9**	
	2½ in×3 yd	47	9	..	..	**5**	**10**	
	3 in×3 yd	56	9	..	..	**6**	**10½**	
	4 in×3 yd	74	9	..	..	**9**	**0**	
Varicose (733 Lastonet) cream		16	6	5	6	**2**	**9**	
Vecortenol (262 CIBA)								
	4 mils	15	8	..	..	**23**	**6**	
	10 mils	35	4	..	..	**53**	**0**	
Velvet's (1389 Velvet)								
soft tissues								
"Four-in-one" pack		..		..	..	**2**	**0**	
Veriloid (1061 Riker)								
tablets, 1 mgm ..	100	160	0	..	..	**20**	**0**	
	500	720	0	..	..	**90**	**0**	
2 mgm ..	100	304	0	..	..	**38**	**0**	
	500	1368	0	..	..	**171**	**0**	
ampoules intravenous,								
0·4 mgm/5 mils ..	6	200	0	..	..	**25**	**0**	
intramuscular,								
1 mgm/2 mils ..	6	184	0	..	..	**23**	**0**	
Veriloid VP (1061 Riker)								
tablets	100	312	0	..	..	**39**	**0**	p1s1s4
	500	1408	0	..	..	**176**	**0**	p1s1s4
Delete Versenate (1061 Riker)								
Versitol (108 Bell) ..	4 oz	54	0	..	..	**6**	**0**	
	16 oz	13	6ea		..	**18**	**0**	
Vetidrex (262 CIBA)								
vial 10 mils	1	13	2ea		..	**19**	**9**	VSO
	5	63	0ea		..	**94**	**6**	VSO
Viomycin P (378 TDC)								
1·0 gm	5	65	5ea		..			TS
Vita-Glow (299 CV) ..		78	0	..	..	**9**	**9**	
Vitorange (549 Guest) tablets		10	0	..	..	**1**	**3**	
		20	0	..	..	**2**	**6**	
Viules (147 Boots)								
Hydrocortistab								
25 mgm/1 mil ..	6	8	3ea		..	**11**	**0**	TS
50 mgm/2 mils ..	6	16	6ea		..	**22**	**0**	TS
R morphine sulphate gr ½/mil	6	42	0	..	..	**5**	**3**s1	DD
Vivomin (324 Crookes)	12 oz	76	6	..	..	**8**	**6**	
Warm Glow (278 Cole)								
electric blankets								
"Juno" ..	50×30 in	43	1½ea	10	5ea	**67**	**11**	
"Sylvia" ..	60×33 in	56	3ea	13	7ea	**88**	**7**	
"Diana" ..	60×51 in	76	10½ea	18	6ea	**121**	**0**	
"Sherbourne"	60×31 in	71	3ea	17	2ea	**112**	**2**	
"Dorchester"	60×51 in	99	4½ea	23	11ea	**156**	**5**	
"Vigilux" single	65×36 in	127	6ea	30	9ea	**200**	**9**	
double	72×58 in	187	6ea	45	2ea	**295**	**2**	
twin	72×58 in	210	0ea	57	7ea	**330**	**7**	
Delete Wellcome (208 BW)								
diphtheria prophylactic								
D.T.P.P. .. 1 cc	3							
10 cc								
Delete Wellcome (208 BW) blackleg								
antiserum (vet)	10 mils							
Wincarnis (279 Coleman)								
wine gold label ..		74	6	..	..	**8**	**0**	
		140	0	..	..	**15**	**0**	
A **Woodwards** (1346 Woodward)								
gripe water		17	8	4	3	**2**	**3**	
Wright's (1351 WLU)								
insect killer aerosol ..		34	9	..	..	**4**	**0**	
air sweetener aerosol ..		34	9	..	..	**4**	**0**	
moth proofer aerosol ..		34	9	..	..	**4**	**0**	
wasp killer		10	3	..	..	**1**	**7**	
Xylocaine (394 Duncan)								
viscous	150 mils	100	0	..	..	**12**	**6**	
Zoflora (1232 T&R) aerosol		31	6	..	..	**3**	**9**	

ADDITIONS TO KEY TO SUPPLIERS:

(2 Abbott) = ABBOTT LABORATORIES LTD., 8 Baker Street, London, W.1. Hunter 1381.
(48 AP) = ANDRE PHILIPPE LTD., 16 Cosway Street, N.W.1.
(78 AS&Co) = AYRTON, SAUNDERS & CO., LTD., P.O. Box 38, 34 Hanover Street, Liverpool 1. Royal 8282.
(108 Bell) = BELL & SONS LTD., Gascoyne Street, Liverpool, 3. Central 3367.
(128 Biometica) = BIOMETICA LTD., Elstree Way, Boreham Wood, Herts. Elstree 1721.
(150 Bourjois) = BOURJOIS LTD., Queens Way, Croydon, Surrey.
(234 Cartwright) = W. B. CARTWRIGHT, LTD., Rawdon, Leeds. Rawdon 713/6.
(299 CV) = COSMETIQUE VIGDOR (LONDRES) LTD., Vigdor House, 40 Lyon Street, London, N.1. North 3114.
(327 WC) = WALTER CROWE LTD., 26 City Road, London, E.C.1. Monarch 4616.
(365 Demuth) = R. DEMUTH LTD., Bear Lane, Farnham, Surrey. Farnham 5194.
(406 WE) = WILLIAM EDGE & SONS, LTD., Raphael Street, Bolton, Lancs. Higher Bolton 41201.
(463 Fisons) = FISONS LTD., Harvest House, Felixstowe, Suffolk.
(477 AF&B) = ALFRED FRANKS & BARTLETT CO., LTD., 226 Gray's Inn Road, London, W.C.1. Ter. 9865.
(508 GEVAERT) = GEVAERT LTD., Great West Road, Brentford, Middlesex. Isleworth 2131.
(499 Richter) = GEDEON RICHTER (GT. BRITAIN) LTD., Richter House, 14 Weedington Road, N.W.5.
(503 G) = GEISTLICH SONS LTD., Melrose Avenue, Chester. Chester 35118.
(521 Glenwood) = GLENWOOD LABORATORIES LTD., 21 Jockeys Fields, Bedford Row, London, W.C.1. Chancery 5988.
(596 HR) = HELENA RUBINSTEIN LTD., 3 Grafton Street, London, W.1. Grosvenor 7501.
(604 Hewlett) = C. J. HEWLETT & SON, LTD., P.O. Box 117, King George's Avenue, Watford, Herts. Watford 34401.
(614 Hoechst) = HOECHST PHARMACEUTICALS LTD., Slough, Bucks. Slough 22322.
(639 HH) = HUNTER HARDY LTD., Dawson Street, Hyde, Cheshire. Hyde 2621.
(654 Innoxa) = INNOXA (ENGLAND) LTD., 1 Eden Street, N.W.1.
(673 J of H) = JOHNSONS OF HENDON LTD., Hendon Way, London, N.W.4. Hendon 8051.
(677 JK) = JOSEPHINE KELL, LTD., 24 Old Bond Street, London, W.1. Hyde Park 7353.
(708 Knoll) = KNOLL LTD., 20 Gerrard Street, London, W.1. Gerrard 3246.
(726 Lancome) = LANCOME (ENGLAND) LTD., 14 Grosvenor Street, London, W.1. Hyde Park 6811.
(747 LEO) = LEO LABORATORIES, 223 Kensington High Street, London, W.8. Western 3888.
(797 MSG) = MARIA ST. GEORGE LTD., 12 Phillimore Terrace, London, W.8.
(809 M&W) = MATTHEWS & WILSON, LTD., 45 Morrish Road, London, S.W.2. Tulse Hill 5881.
(816 Mayborn) = MAYBORN PRODUCTS LTD., Dylon Works, Berrymans Lane, London, S.E.26. Sydenham 4422.
(830 Medo) = MEDO-CHEMICALS, LTD., 144 Fortess Road, London, N.W.5. Gulliver 3352.
(831 Meggeson) = MEGGESON & CO., LTD., Llewellyn Street, London, S.E.16. Bermondsey 1741.
(884 NB) = NEVILLE BROWN & CO., LTD., 77 Newman Street London, W.1. Langham 7161.
(888 Newey) = NEWEY BROTHERS LTD., Brearley Street, Summer Lane, Birmingham, 19.
(890 NC & C) = NEWTON CHAMBERS & CO., LTD., Thorncliffe, Sheffield. Ecclesfield 3171.
(944 PCP) = P C PRODUCTS, LTD., 33 Union Street, London, S.E.1. HOP 2841.
(1028 Rapidol) = RAPIDOL LTD., Inecto House, 27 Dover Street, W.1.
(1123 Secto) = SECTO LTD., Shaw Street, Blackburn, Lancs.
(1229 T&C) = THOMPSON & CAPPER LTD., Speke Hall Road, Liverpool, 24. Hunts Cross 1321.
(1242 Toni) = TONI COSMETICS, Harlequin Avenue, Brentford, Middlesex. Isleworth 4343.
(1272 VB&G) = V. B. & G. PRODUCTS, 16 Queen Street, Leicester. Leicester 59413.
(1278 Veritas) = VERITAS DRUG CO., LTD., 223 Kensington High Street, London, W.8.
(1306 WCL) = WARD CASSON LTD., 146 Holborn, London, E.C.1. Chancery 9664.
(1307 Waterhouse) = J. WATERHOUSE & CO., LTD., Church Street, Old Square, Ashton-under-Lyne. Ashton 3693.
(1388 Durazone) = DURAZONE (SALES), LTD., Lovers Walk, Ballards Lane, London, N.3.
(1389 Velvet) = VELVET CREPE PAPER CO., LTD., Alperton, Middlesex.
(1390 SFA) = SAFETY FIRST AID CO., LTD., 12 Duke Street, London, S.W.1.
(1391 CHB) = CHB SUPPLIES, Market Chambers, Market Place, Blackheath, Birmingham.
(1392 TT) = TEDSON THORNLEY & CO., LTD., Rochdale, Lancs.
(1393 Hazlewood) = HAZLEWOOD & SONS, LTD., Factory Lane, Derby Road, Widnes, Lancs.
(1395 Purser) = PURSER'S LONDON (HOLBORN) LTD., 12 Fulwood Place, W.C.1.
(1396 Plantoid) = PLANTOIDS LTD., 153 Masons Hill, Bromley, Kent.

PHARMACEUTICAL SOCIETY OF NORTHERN IRELAND

A LETTER from the Northern Ireland Ministry of Home Affairs read at the monthly meeting of the Council of the Pharmaceutical Society of Northern Ireland, held in Belfast, on April 21, gave approval to the appointment of examiners nominated by the Council.

The VICE-PRESIDENT (Mr. A. Templeton) who presided, told members that Mr. J. Caldwell (president) had gone into hospital for further treatment but hoped to be discharged at the end of that week. Mr. H. W. Gamble, who had also been in hospital for some weeks, had now returned home and was convalescing satisfactorily.

Applications from John J. Benson and Sarah Jane Graham (née Kyle) for restoration of their names to the register were granted.

A letter was read from a candidate who intended to attempt the Part I examination under the old syllabus in June but had now been admitted to hospital. He asked if his examination could be deferred because he expected to be in hospital for about eight months. After discussion it was agreed that the regulations did not permit the Council to hold any further Part I examinations under the old regulations after June and the secretary was instructed to express the Council's sympathy with the candidate but inform him that no further opportunity would be available for taking the examination after June.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," April 27

Far shampoos and preparations for the hair (3)
PEARLMARIN, 771,426, by Goldwell, G.m.b.H., Chemische Fabrik H. E. Dotter, Darmstadt-Eberstadt, Germany.

For liquid detergents (not for use in industrial or manufacturing processes) for washing textiles (3)
SWAR, 795,380, by H. Gidney Chandler & Co., Ltd., London, W.1.

For chemical cleaning preparations for removing ink stains and wax stains fram smooth surfaces (3)
MASTERFAX, 796,330, by Ditto Incorporated, Chicago, Illinois, U.S.A.

For shampoos (3)
BLUE HEAVEN, 796,735, by Akos Chemicals, Ltd., London, E.2.

For cosmetics and non-medicated toilet preparations (3)
EYLURE-LIQUA-LINER, 797,431, by Eylure, Ltd., Welwyn Garden City, Herts.

For detergents (not for use in industrial or manufacturing processes) (3)
BONUX, 797,691, by Thomas Hedley & Co., Ltd., Newcastle-on-Tyne.

For non-medicated toilet preparations for the skin, for export from the United Kingdom except to the Republic of Ireland and the Channel Islands (3)
POLYDERM, 798,595, by Chesebrough-Pond's, Inc., New York, U.S.A.

For non-medicated preparations for the hair (3)
ROCKET, 800,832, by Lincoln Hair Products, Ltd., London, W.3.

For toilet shampoos manufactured and for sale in the United Kingdom and for export to the Republic of Ireland and the Channel Islands (3)
Device with words VASELINE LIQUID SHAMPOO, 798,596, by Chesebrough-Pond's, Ltd., London, N.W.10.

For all goods for sale in the United Kingdom and for export to the United States of America and to their respective Colonies and Dependencies as constituted on the 29th April, 1954, and to the Republic of Ireland (3) *and for all goods for sale in the United Kingdom and for export to the United States of America and to their respective Colonies and Dependencies as constituted on 29th April, 1954, and to the Republic of Ireland; and veterinary and sanitary substances and infants', invalid's and diabetics' foods, all for export to Greece and her Colonies as constituted on 29th April,* 1954 (5)
OXO, 729,714-15, by Oxo, Ltd., London, E.C.4.

For pharmaceutical preparations for human and veterinary use (5)
Devices with letters SKF, 773,864-66, by Smith Kline & French Laboratories, Ltd., London, S.E.5.

For all goods (5)
Device with word LEUNAWERKE, 785,737, by Veb Leuna-Werke "Walter Ulbricht," Leuna, near Merseburg, Germany. MADECASSOL, 791,933, by Laboratoires Laroche Navarron, S.A., Levallois-Perret (Seine), France. PENOFOME, 799,293, by Ward, Blenkinsop & Co., Ltd., London, W.C.1. LUBASPORIN, 799,540, by Wellcome Foundation, Ltd., London, N.W.1. BIDIZOLE, 799,656, MAJEPTIL, 799,658, by May & Baker, Ltd., Dagenham, Essex.

For sanitary towels and pads, all being articles of sanitary clothing; pharmaceutical cotton wool, lint for medical purposes, gauze for dressings, surgical swabs, surgical ligatures, materials prepared for bandaging, and binders for dressings (5)
AZOTEX, 791,034, by Alexander Carus & Sons, Ltd., Darwen, Lancs.

For pharmaceutical foods, infants' and invalids' foods, dietetic foods and pharmaceutical preparations for use as additives for food (5)
SILHOUETTE, 792,642, by Larsons Produkte, A.G., Clarus, Switzerland.

For hæmostatics (5)
VASCOLAREMA, B793,275, by Laboratorio Chimico Farmaceutico V. Baldacci, Pisa, Ltaly.

For substances for taking dental impressions (5)
ZELGAN, 793,590, by Amalgamated Dental Co., Ltd., London, W.1.

Far preparations of vitamins in tablet form (5)
WHEAMOL, 794,506, by Kenneth Frank Boardman-Weston, Castle Donington, nr. Derby.

For pharmaceutical preparations for human and veterinary use, sanitary substances, medical and surgical plasters, materials prepared for bandaging, disinfectants and antiseptics (5)
EUDISTAREN, 797,213, by J. R. Geigy, S.A. (J. R. Geigy, A.G.), Basle, Switzerland.

For medical and veterinary preparations, all containing calamine (5)
CORTOCALAMINE, 799,371, by Crookes Laboratories, Ltd., London, N.W.10.

For pharmaceutical preparations (5)
ANAFLEX, 800,104, by Ed. Geistlich Söhne, A.G. für Chemische Industrie, Wolhusen, Switzerland.

For baby pants of plastics (25)
DUCKY, B795,403, by Erica Products, Ltd., London, W.10.

For babies' pants (25)
DISPANTS, 798,636, by Harringtons (London), Ltd., New Addington, Surrey.

NOTES ON NEW MEDICAMENTS

STIMPLETE. — *Constituents:* Dexamphetamine, phenobarbitone, aneurine, and other B-group vitamins. In the treatment of mild depression, combined sedative and stimulant therapy may produce better results than either constituent given alone. The added vitamins are useful when treating the depression associated with dietary restrictions in obesity. Drinamyl and Mylodex are preparations of dexamphetamine and amylobarbitone without vitamin supplements and Barbidex contains phenobarbitone with dexamphetamine in a resin-bonded form.

HYPERTENSIN.—*Chemistry:* A synthetic polypeptide containing eight amino-acids. Such polypeptides, known as hypertensins, occur naturally. They may have eight or ten amino-acids, and differ from one animal species to another. Hypertensin has a powerful pressor effect by a direct action on the peripheral blood vessels and, by virtue of its effects on haemodynamincs, it is an "anti-shock" agent. Its brief action makes a continuous intravenous infusion necessary to maintain the effects. Even in high therapeutic doses, such continuous injection is free from local or general side effects. Other available pressor drugs are the sympathomimetic amines, which have a very different chemical structure. The rapid but short-acting compounds includes noradrenaline (Adrenor, Levophed) and metaraminol (Aramine). Longer-acting pressor drugs include methylamphetamine (Methedrine), mephentermine (Mephine) and methoxamine (Vasoxine).

NARDIL.—*Chemistry:* β-Phenylethyl hydrazine dihydrogen sulphate (phenelzine). Like certain other hydrazine derivatives, inhibits the action of the enzyme monoamine oxidase. That enzyme, present in certain cerebral tissues, is concerned with the fundamental biochemical activities of the brain. Inhibition of the enzyme results in an increase in the concentration of certain amines in the brain, followed by an anti-depressant effect. The newer compounds now available have a more selective action, and cause few of the undesirable effects of the early hydrazine derivatives. Niamid (nialamide), Marsilid (iproniazid), Marplan (isocarboxazid) and Cavodil (phenyl isopropyl hydrazine) represent compounds of similar pharmacological activity.

MELLERIL.—*Chemistry:* 10[2-(N-methyl-2-piperidyl) ethyl]-2-methyl thiophenothiazine hydrochloride, or thioridazine. The pharmacological action of the phenothiazine derivatives is basically similar, but is subject to considerable modification according to the substituents in 2 and 10 positions. In some compounds the 2-position is unsubstituted; several others are chlorinated, but thioridazine is exceptional in having a thiomethyl group at that point. The terminal group on the side-chain at the 10 position is also of considerable importance. Chlorpromazine has a simple dimethyl amino group there. Several later derivatives have a cyclic group, which may modify the pharmacological action considerably. Thus prochlorperazine, which has a methyl piperazinyl terminal group, is mainly anti-emetic in action, with little psychosedative effect. Thioridazine has a methyl piperidyl group, and here the action is reversed, as the anti-emetic powers have dwindled almost to vanishing point, but the compound has a powerful tranquillising action which is more specific than that of other compounds. Related products with terminal cyclic groups include thiopropazate (Dartelan), perphenazine (Fentazin) and trifluperazine (Stemetil). The last-named is unique in having a trifluoro methyl substituent in the 2-position.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, May 9

COLCHESTER BRANCH, PHARMACEUTICAL SOCIETY, George hotel, High Street, Colchester, at 8 p.m. Mr. H. R. Curley (C. L. Bencard, Ltd.) on "Allergic Diseases in Man."

COVENTRY BRANCH, NATIONAL PHARMACEUTICAL UNION, The Hare and Squirrel, Cow Lane, Coventry, at 7.30 p.m. Meeting for election of officers; discussion on proposed local advertising scheme.

STOCKPORT BRANCH, PHARMACEUTICAL SOCIETY, Warren Bulkeley hotel, Stockport, at 8 p.m. Annual meeting.

Tuesday, May 10

AGRICULTURE GROUP, SOCIETY OF CHEMICAL INDUSTRY, 14 Belgrave Square, London, S.W.1, at 6 p.m. Annual meeting.

BIRMINGHAM BRANCH, PHARMACEUTICAL SOCIETY, Chamber of Commerce, New Street, Birmingham, at 7.45 p.m. Annual meeting.

DONCASTER BRANCH, PHARMACEUTICAL SOCIETY, Ivanhoe hotel, Sprotborough. Annual meeting.

LONDON SECTION, ROYAL INSTITUTE OF CHEMISTRY, Warren Spring Laboratory, Stevenage, Herts, at 2.30 p.m. Visit.

SOUTH-EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, New Cross inn, 323 New Cross Road, London, S.E.14, at 7.45 p.m. Annual meeting.

Wednesday, May 11

FINCHLEY BRANCH, PHARMACEUTICAL SOCIETY, Wellcome Building, Euston Road, London, N.W.1, at 7.30 p.m. Visit to Wellcome museums.

FOOD GROUP, SOCIETY OF CHEMICAL INDUSTRY, 14 Belgrave Square, London, S.W.1, at 6.15 p.m. Annual meeting.

MERSEYSIDE BRANCH, NATIONAL ASSOCIATION OF WOMEN PHARMACISTS, Mansion House, Liverpool, at 6 p.m. for visit to Calderstone Park.

SWANSEA AND WEST GLAMORGAN BRANCH, PHARMACEUTICAL SOCIETY, Mackworth hotel, Swansea, at 7.45 p.m. Annual meeting.

UNIVERSITY OF LONDON, SCHOOL OF PHARMACY, 29 Brunswick Square, London, W.C.1, at 5.30 p.m. Professor H. B. Van Dyke (Columbia University, New York) on "Neurohypophyseal Hormones of Vertebrates."

WESTERN PHARMACISTS' ASSOCIATION AND BRANCHES, Rotary House, 21 Portman Square, London, W.1, at 7.30 p.m. Annual meeting.

Thursday, May 12

LEEDS BRANCH, PHARMACEUTICAL SOCIETY, Griffin hotel, Leeds, at 8 p.m. Annual meeting.

NOTTINGHAM BRANCH, PHARMACEUTICAL SOCIETY, B.P. Exploration Co., Ltd., Notts oilfields. Visit. Leaving Nottingham 11 a.m.

OXFORDSHIRE BRANCH, PHARMACEUTICAL SOCIETY, Glaxo Laboratories, Ltd., Greenford, Middlesex. Visit. Leaving Martyr's Memorial, Oxford, 1.30 p.m.

THAMES VALLEY PHARMACISTS' ASSOCIATION, Kingston hotel, Kingston-upon-Thames, at 7.45 p.m. Mr. C. D. Pole (Kodak, Ltd.) on "Introduction to Colour."

Advance Information

PHARMACEUTICAL SOCIETY, 17 Bloomsbury Square, London, W.C.1, at 7.30 p.m., on May 26. Dr. D. Train (reader in pharmaceutics, School of Pharmacy, London University) on "Pharmaceutical Aspects of Mixing Solids."

TELEVISION

Figures in the columns represent number of appearances of the product during the week.

May 15–21	London	Midland	North	Scotland	Wales	South	N.E.	Ulster	Anglia
Alka-Seltzer ...	1	2	1	1	1	1	1	1	1
Anadin	4	5	5	5	4	4	3	5	—
André Philippe bubble bath ...	—	—	—	—	—	—	—	1	—
Andrews liver salt ...	—	—	—	—	4	—	3	—	—
Anne French ...	1	2	1	1	1	1	—	—	—
Askit	—	—	—	12	—	—	—	—	7
Aspro	—	—	—	—	6	—	—	—	—
Beecham's pills ...	2	2	2	2	1	—	2	1	1
Beecham's powders .	3	3	3	3	3	3	3	3	3
Biladin	—	—	—	—	—	—	6	—	—
Bristow's lanolin shampoo	3	3	3	—	—	3	—	—	—
Christy's lanoline face pack	3	3	2	3	3	3	3	3	3
Cuticura	2	—	1	—	—	—	—	—	—
Delsey	—	—	—	—	3	—	—	—	—
Dixor products ...	1	3	—	—	1	—	—	—	—
Ellimans Universal embrocation ...	—	—	—	—	—	—	1	—	—
Euthymol toothpaste	—	—	—	—	—	—	—	—	3
Fashion Style ...	3	3	3	3	3	3	3	3	3
Formula 21	2	3	3	3	3	3	3	3	3
Freshaire	2	1	1	1	1	1	1	1	2
Fynnon salts ...	1	1	1	1	1	1	1	1	1
Germolene	3	3	3	3	3	3	3	3	3
Hemotabs	—	—	2	—	—	—	—	—	—
Immac	2	1	1	2	1	—	1	—	—
Imperial Leather soap	2	2	3	2	2	2	2	2	2
Johnson's Baby Suds	—	—	2	—	—	—	—	—	—
Kruschen	—	—	2	—	—	—	3	—	3
Lanospray	3	4	4	3	3	3	3	3	3
Lubin parfum de toilette... ...	—	—	—	—	—	1	—	—	—
Marigold baby pants	—	2	1	—	—	—	—	—	—
Max Factor	2	2	2	2	2	2	2	2	2
Milk of Magnesia...	—	1	1	—	—	—	—	—	2
tablets	1	—	—	2	2	1	2	2	—
Monastery herbs ...	—	—	—	—	—	—	3	—	—
Pal-Injectomatic ...	5	5	5	5	5	5	5	5	5
Pepsodent toothpaste	3	3	2	3	3	2	3	3	3
Phyllosan	1	—	—	—	1	1	—	—	—
Placentubex	—	—	—	—	—	1	—	—	—
Radox	1	—	—	—	—	—	—	—	—
Ramer sponges ...	1	—	—	3	—	—	—	—	—
Remington shavers...	—	1	1	1	1	—	—	1	1
Rennies	2	2	3	3	3	3	2	2	3
Rimmel " Beauty on a budget " ...	—	—	—	1	1	1	1	—	—
Rinstead pastilles ...	1	—	1	1	3	1	2	—	3
Rivella	4	—	—	—	—	—	—	—	—
Scentinel Swish ...	—	1	1	1	1	1	—	—	—
Setlers	2	1	2	—	2	1	2	—	—
Silvikrin hair cream	—	3	1	—	—	—	—	—	3
Sparkleen	—	—	—	—	—	3	—	—	—
Spree fruit squash...	6	6	6	6	6	6	6	6	6
Tru-gel	4	5	5	3	3	3	3	2	3
Winspray products .	—	1	—	—	—	1	—	—	—
Yeast-vite	1	—	1	2	1	1	1	1	1
Zoflora	2	—	—	—	—	—	—	—	—

PRINT AND PUBLICITY

PUBLICATIONS

Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

Boots Pure Drug Co., Ltd., Station Street, Nottingham: " Boots multi-dose vials." (4-p. folder).

The British Drug Houses, Ltd., Graham Street, London, N.1: " Secrosteron and Mepilin " (8-p. folder).

British Schering, Ltd., 229 Kensington High Street, London, W.8: " Neo-Mercazole—extracts from published papers."

Geigy Pharmaceutical Co., Ltd., Wythenshawe, Manchester, 23: " Hygroton-diuretic " (10-p. booklet).

Organon Laboratories, Ltd., Brettenham House, Lancaster Place, London, W.C.2: Actriol (4-p. folder).

Ward, Blenkinsop & Co., Ltd., 37 Queen Square, London, W.C.1: " Ekammon-soluble," " Warfarin Sodium " (information cards).

Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, Essex: " When the patient is a child " (20p. booklet).

Pharmethicals (London), Ltd., 20 Gerrard Street, London, W.1: " Primolut N—Menorrhagia," " Primolut N—Metropathia Hæmorrhagica " (6-p. folders).

Sandoz Products, Ltd., 23 Great Castle Street, London, W.1: " Melleril " (28-p. booklet).

Upjohn of England, Ltd., Crawley, Sussex: " Medrone — short-term strategy against asthma," " Orthoxine " (4-p. folders).

Vitamins, Ltd., Upper Mall, London, W.6: " Juvel," " Vitavel syrup " (4-p. folders), " Parentrovite " (bookmark).

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical periodicals.

Inhibition of monoamine oxidase by benactyzine *in vitro* and *in vivo*. *Nature*, April 16.

Tolbutamide. Use of, in *Paralysis agitans*. *J. Amer. med Ass.*, March 26.

Trimeprazine tartrate. Clinical observations on the use of, as a sedative and premedicant in horses, cattle, pigs and dogs. *Vet. Rec.*, April 23.

Immunity to helminths. *Vet. Rec.*, April 23.

Medical uses of the *Allium* family through the ages. *Aust. J. Pharm.*, February 29.

Pesticides. The rôle of surface-active substances in the application of. *Chemistry & Industry*, April 23.

Bitter constituents from *Caesalpinia Bonducella*, Flem. *Chemistry & Industry*. April 23.

An ion-exchange resin method for the fractionation of alcoholic plant extracts. *Nature*, April 23.

Gibberellic acid and osmotic pressure. *Nature*, April 23.

Pigment-producing strains of *Acetobacter aceti*. *Nature*, April 23.

Niacin. A micromethod for testing for. *Nature*, April 23.

Eclipse phase of vaccinia virus. *Nature*, April 23.

Transmission of the viruses of trachoma, inclusion blennorrhœa, and lymphogranuloma to mice. *Nature*, April 23.

Analgesics in rheumatic disorders. *Brit. med. J.*, April 23.

Local anæsthetics, mode of action. *J. Pharm. Pharmacol*, May.

Glycyrrhetinic acid — a triterpene with anti-œstrogenic and anti-inflammatory activity. *J. Pharm. Pharmacol.*, May.

The contribution of surface characters to the wettability of leaves. *J. Pharm. Pharmacol.*, May 1960.

Seromucoid contents of human bile. *Nature*, April 30.

Human leucocytes. Culture of, on the chorio-allantoic membrane of the chick. *Nature*, April 30.

Controlled tests with four new anthelmintic substances against *trichostrongylus axei* in sheep. *Vet. Rec.*, April 30.

The problem of psoriasis. *The Practitioner*, May.

Corticosteroids in dermatology. *The Practitioner*, May.

Broxil. A preliminary trial, in general practice. *The Practitioner*, May.

Heptabarbitone. Clinical experience in general practice. *The Practitioner*, May.

Bromide intoxication. *The Practitioner*, May.

Paromomycin in the treatment of shigella and salmonella infections in children. *The Lancet*, April 30.

Leucine and pellagra. *The Lancet*, April 30.

Salicylate Induced fall in plasma protein bound iodine in hyperthyroidism. *The Lancet*, April 30.

A non-steroidal androgen. *Science*, April 15.

Toxicity of bacterial exotoxins by the oral route. *Science*, April 15.

Quantum Phenomena in biology. *Science*, April 15.

Methandrostenolone. Some experiences with a new anabolic steroid. *Brit. med. J.*, April 30.

Antidiuretic properties of hydrochlorothiazide in *diabetes insipidus*. *Brit. med. J.*, April 30.

Infections of the eye. *Brit. med. J.*, April 30.

PATENTS

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COMPLETE SPECIFICATIONS ACCEPTED

From the " Official Journal (Patents),"

April 27

Medicinal preparations and method of making same. P. Müller and H. R. Hefting. 838,761.

4, 5-epoxy-3-ketosteroid compounds and the preparation thereof. Soc. Farmaceutici Italia. 838,771.

Thioxanthones. CIBA, Ltd. 838,706.

Aminoalchohol-N-sulphonic acid compounds. Upjohn Co. 838,709.

Derivatives of 6-mercaptopurine. Wellcome Foundation, Ltd. (Burroughs Wellcome & Co. (U.S.A.), Inc.). 838,820.

Manufacture of quinone derivatives. CIBA, Ltd. 838,993.

Steroid compounds. Merck & Co., Inc. 838,228.

Steroids and the production thereof. Upjohn Co. 838,654.

Production of gibberellic acid. Imperial Chemical Industries, Ltd., A. Borrow, E. G. Jefferys and I. S. Nixon. 838,032.

Penicillin derivatives. Beecham Research Laboratories, Ltd. 838,874.

Piperazine derivatives and process for the preparation thereof. H. Morren. 837,986.

Resin-drug compounds. Clinical Products, Ltd. 838,952.

Synthesis of -Cyanopropionaldehyde. Ajinomoto Co., Inc. 838,737.

Process for the preparation of levans. Farbenfabriken Bayer, A.G. 837,993.

Process for preparing N-(-substituted-ethyl) piperazines. Abbott Laboratories. 838,744.

Higher alkyl-pyridine-N-oxides. Parke, Davis & Co. 838,746.

Alkenoic acids. Merck & Co., Inc. 838,747.

Heterocyclic compounds. Parke, Davis & Co. 838,748.

Stable solutions and other preparations containing cysteine, and a process for the production thereof. Nordmark-Werke, G.m.b.H. 838,753.

5-(-substituted-phonoxy-methyl)-2-oxazolidone compounds *and their preparation.* Laboratoires O.M., S.A. 838,759.

Dicarbamates of 2-substituted-2-allyl propanediols. C. E. Frosst & Co. 838,702.

6-purinylthioglycosides and their manufacture. Wellcome Foundation, Ltd. (Burroughs Wellcome & Co. (U.S.A.), Inc.). 838,821.

4-substituted steroid compounds and preparation thereof. Soc. Farmaceutici Italia. 838,772 and 838,773.

Spray producers. Rybar Laboratories, Ltd. (O. E. Lehr). 838,453.

Apparatus for depositing stopper corks in the mouths of bottles or the like. Albro Fillers & Engineering Co., Ltd. 838,140.

Aerosol shave cream packages. Colgate-Palmolive Co. 838,913.

British patent specifications are obtainable (price 3s. 6d. each) from The Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2.

WILLS

Mr. H. C. Broad, M.P.S., 52 Townsend Avenue, Southgate, N., left £29,367 gross (£29,297 net).

Mr. K. Loughran, M.P.S., 131 Hatherley Gardens, East Ham, E., left £2,394 (£2,301 net).

Mr. A. J. Plowright, Ph.C., M.P.S., 17 Meadow Close, Tongdean Road, Hove, left £5,261 (£4,548 net).

Mr. J. D. Reynolds, M.P.S., 35 High Street, Bromyard, Herefordshire, left £29,363 (£28,680 net).

Mr. J. F. Sanders, M.P.S., 28 Barrow Point Avenue, Pinner, Middlesex, left £25,464 (£25,358 net).

Mr. A. G. Scott, M.P.S., The Beeches, Keighley Road, Silsden, Yorks, left £16,524 (£15,870 net).

Mr. P. C. Simm, M.P.S., Bryn Bank, Knapp Lane, Ledbury, Herefordshire, left £2,994 (£2,684 net).

Mr. C. H. Thompson, M.P.S., 27 Windsor Road, Linthorpe, Middlesbrough, Yorks, left £8,068 (£7,629 net).